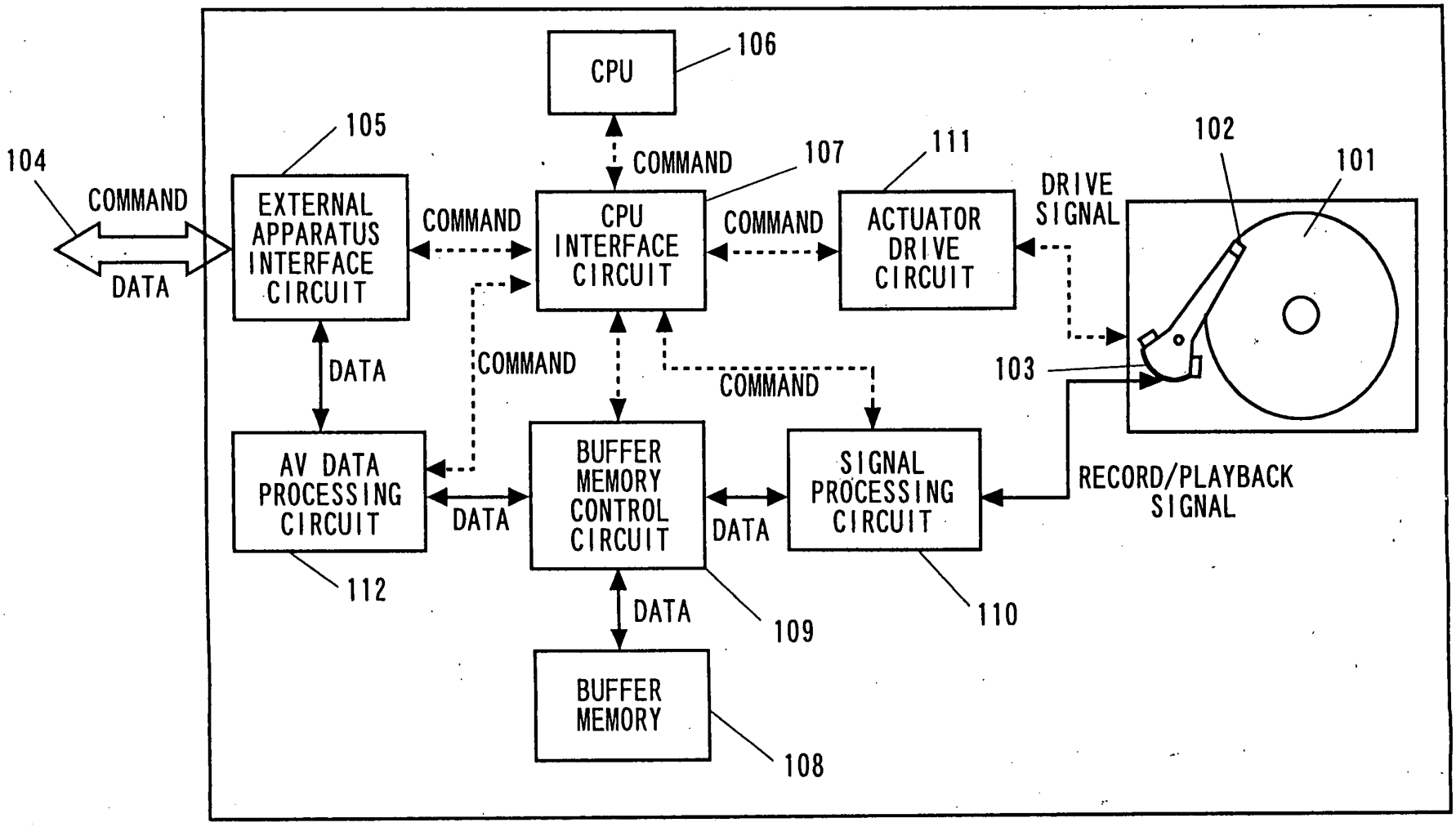
FIG. 1



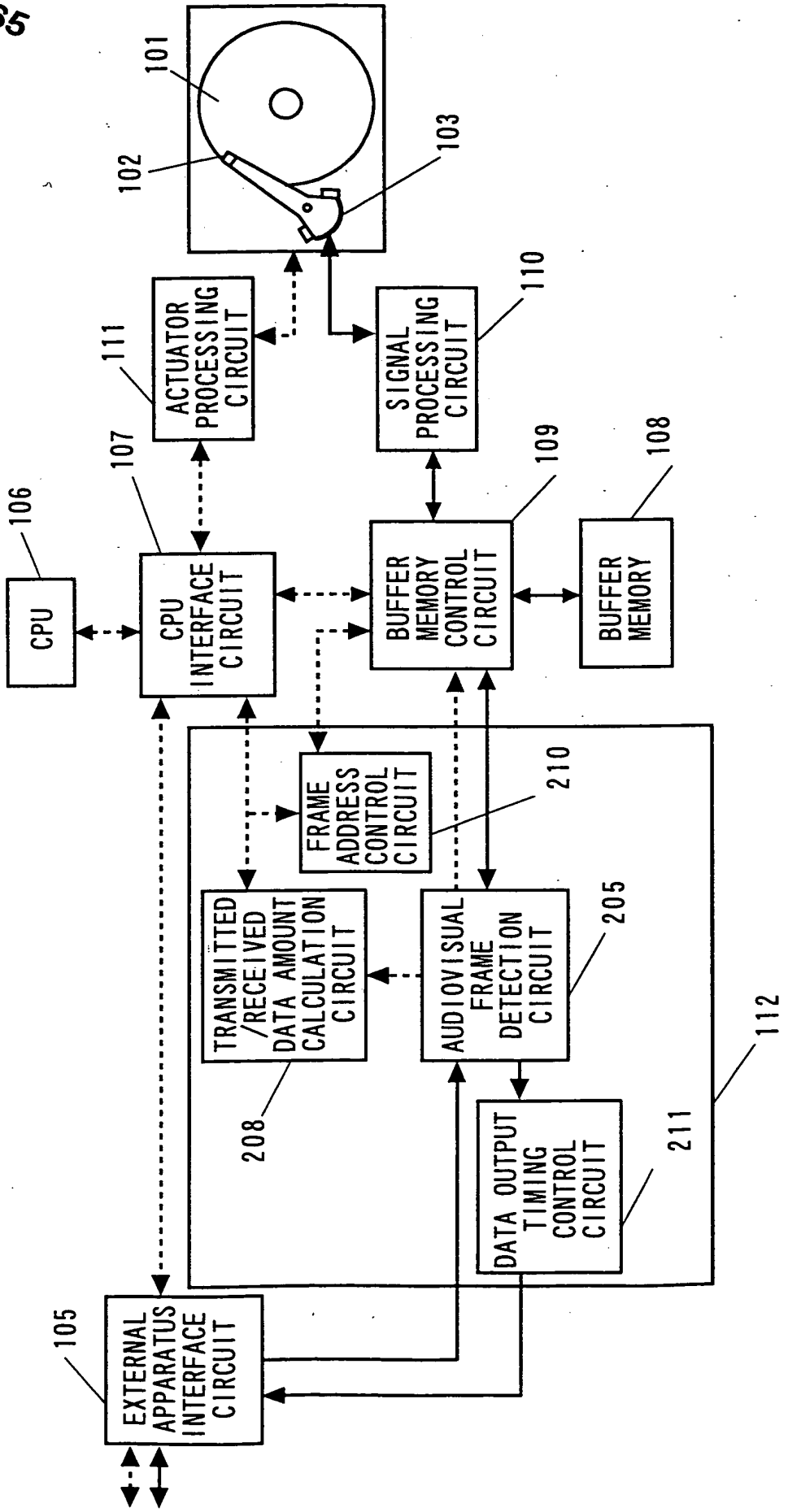

101
102
103
ACTUATOR PROCESSING CIRCUIT
111
SIGNAL PROCESSING CIRCUIT
110
107
106
CPU
CPU INTERFACE CIRCUIT
BUFFER MEMORY CONTROL CIRCUIT
109
108
BUFFER MEMORY
FRAME ADDRESS CONTROL CIRCUIT
210
TRANSMITTED /RECEIVED DATA AMOUNT CALCULATION CIRCUIT
AUDIOVISUAL FRAME DETECTION CIRCUIT
205
208
DATA OUTPUT TIMING CONTROL CIRCUIT
211
112
105
EXTERNAL APPARATUS INTERFACE CIRCUIT

FIG. 2

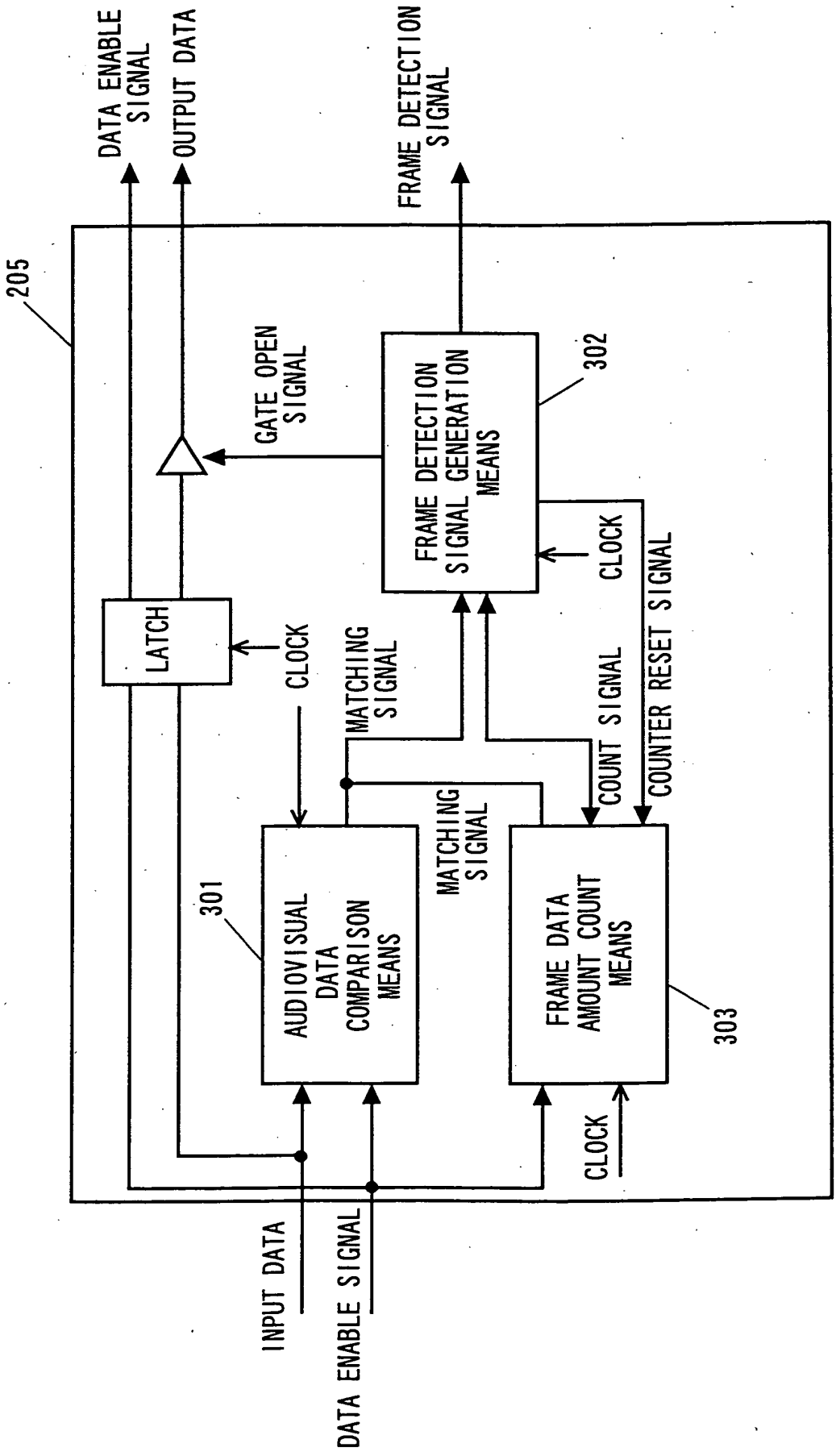
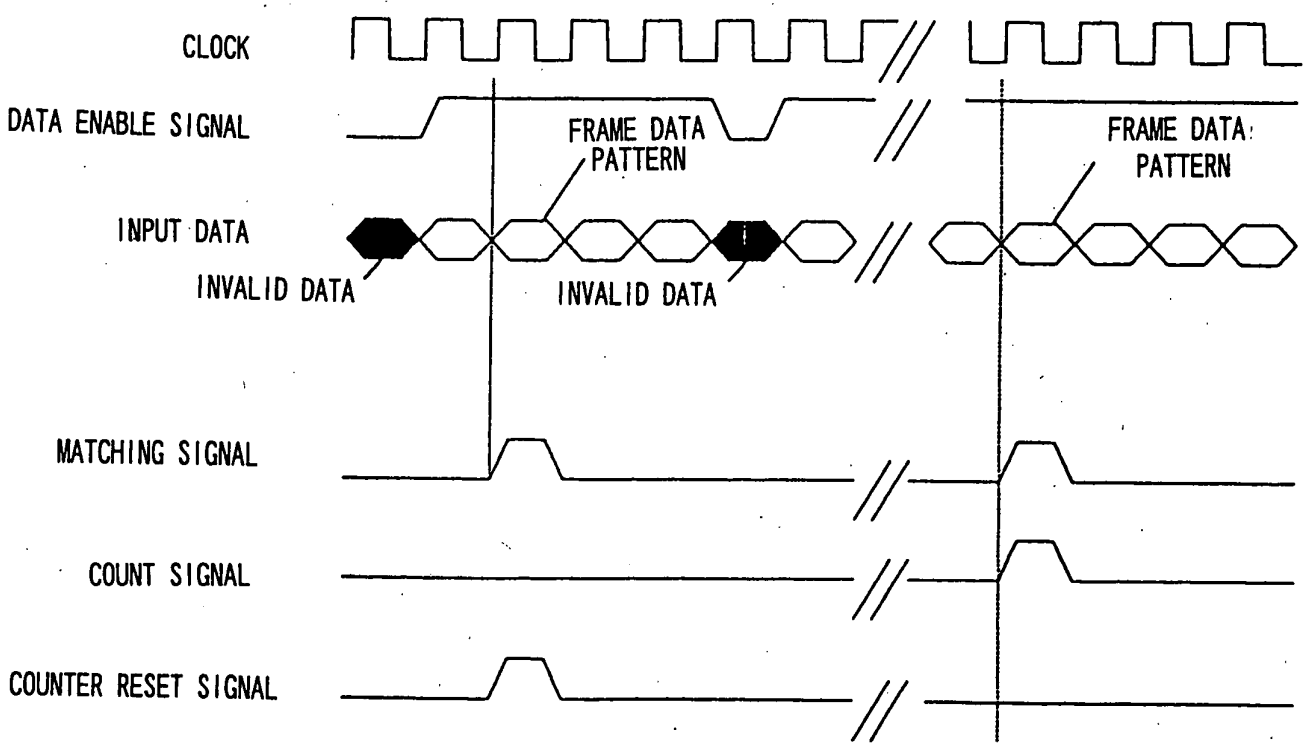

205
DATA ENABLE SIGNAL
OUTPUT DATA
FRAME DETECTION SIGNAL
GATE OPEN SIGNAL
FRAME DETECTION SIGNAL GENERATION MEANS
302
LATCH
CLOCK
MATCHING SIGNAL
CLOCK
COUNT SIGNAL
COUNTER RESET SIGNAL
301
AUDIOVISUAL DATA COMPARISON MEANS
MATCHING SIGNAL
FRAME DATA AMOUNT COUNT MEANS
303
CLOCK
INPUT DATA
DATA ENABLE SIGNAL

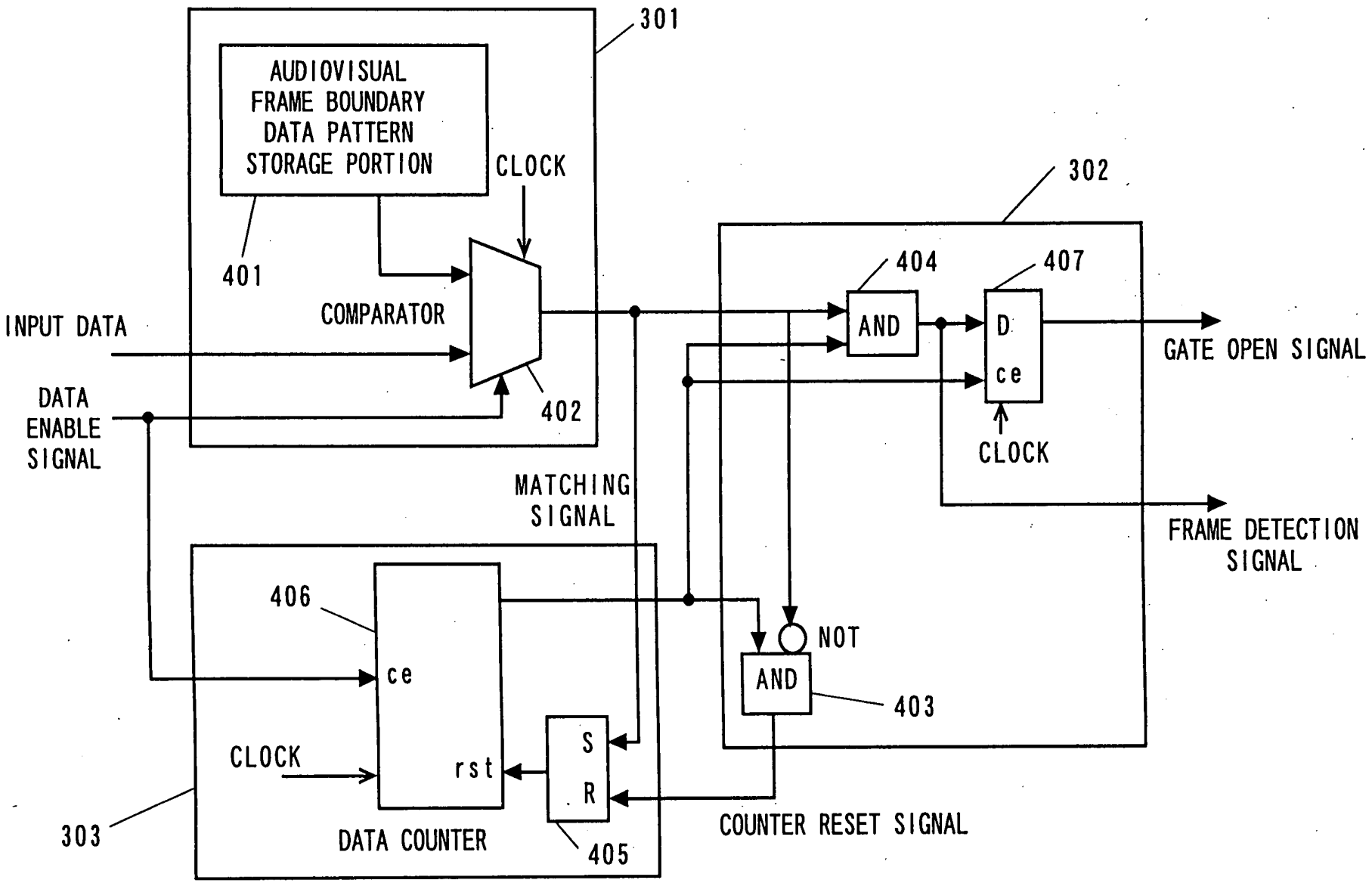
FIG. 3

FIG. 4



TIMING SPECIFICATIONS

FIG. 5



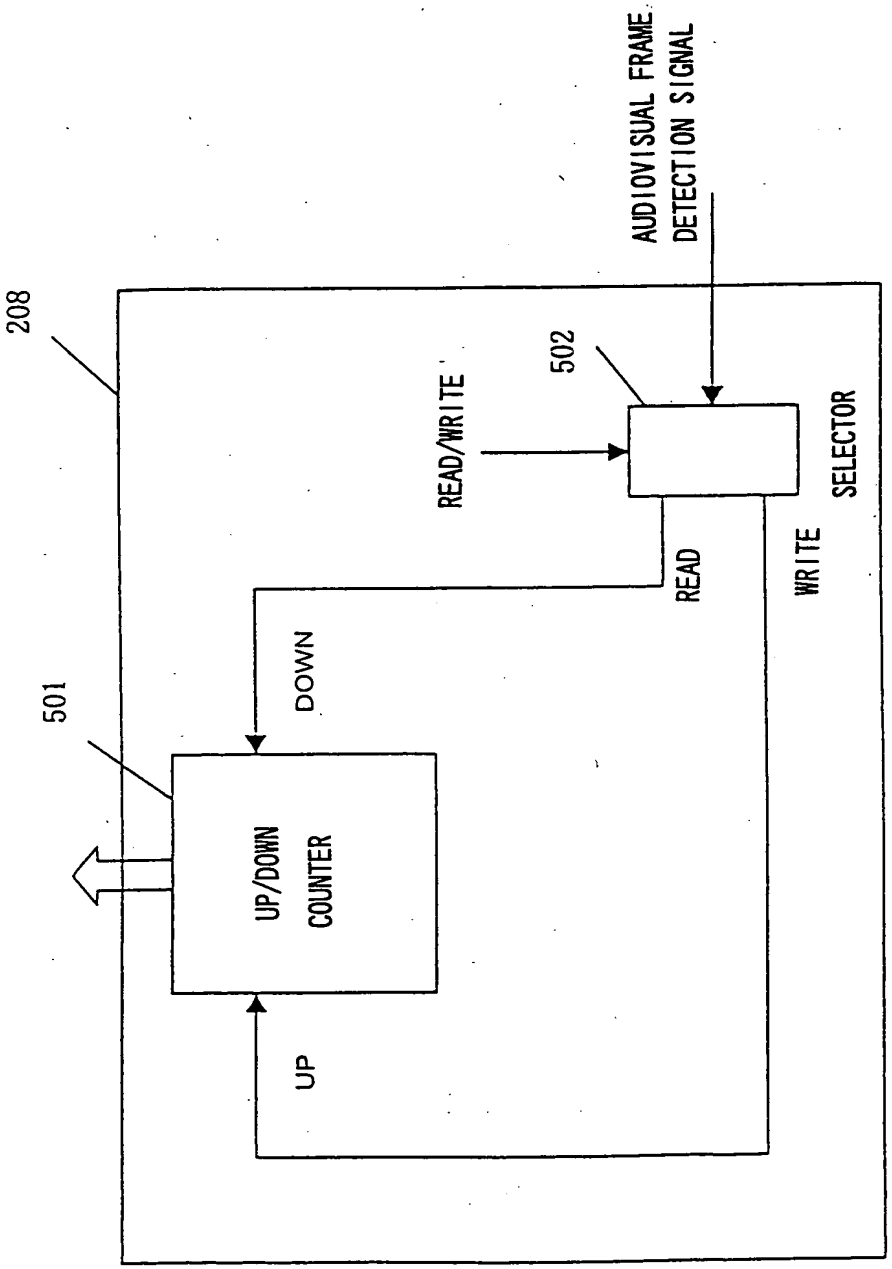
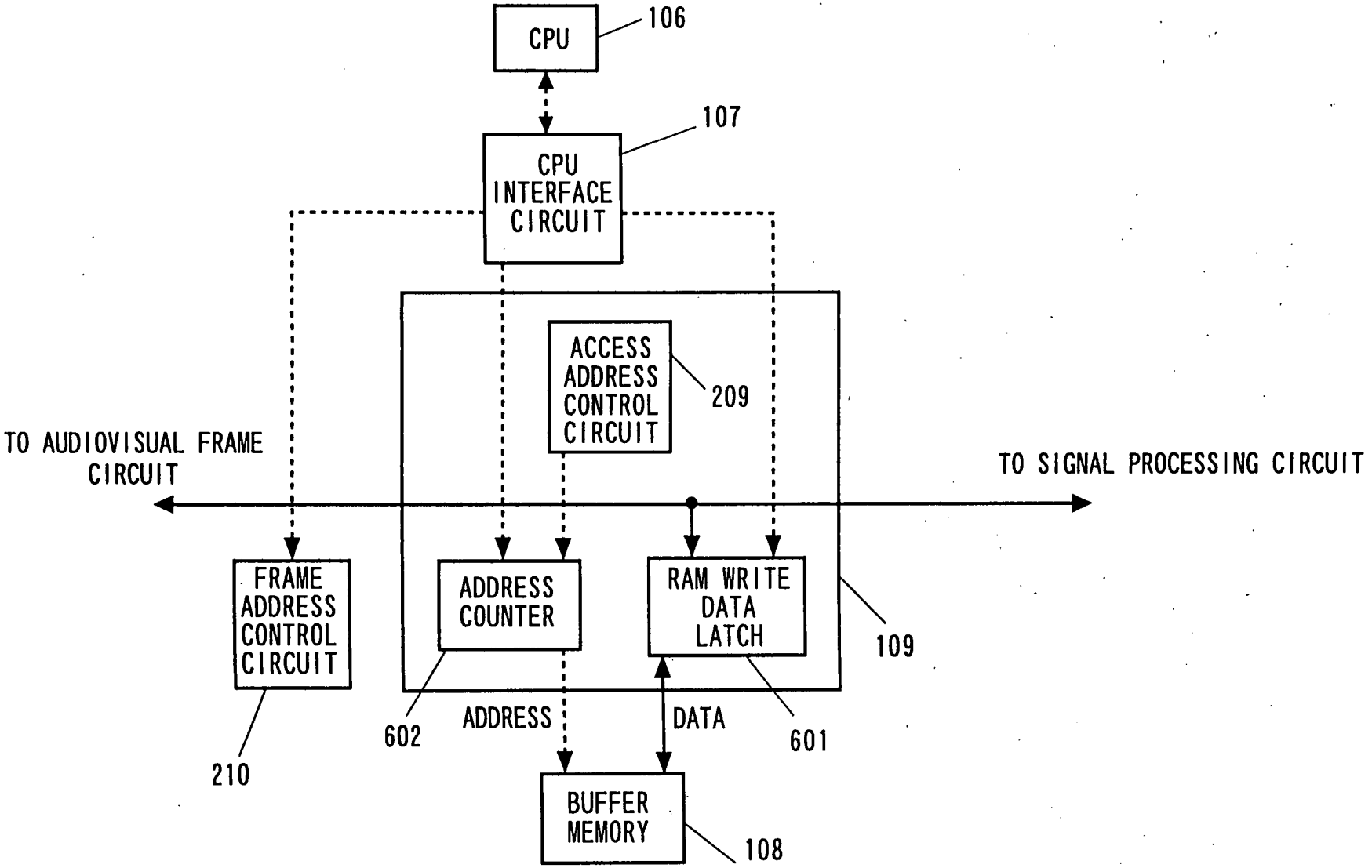

AUDIOVISUAL FRAME
DETECTION SIGNAL
208
502
READ/WRITE
SELECTOR
READ
WRITE
501
DOWN
UP/DOWN
COUNTER
UP

FIG. 6

FIG. 7



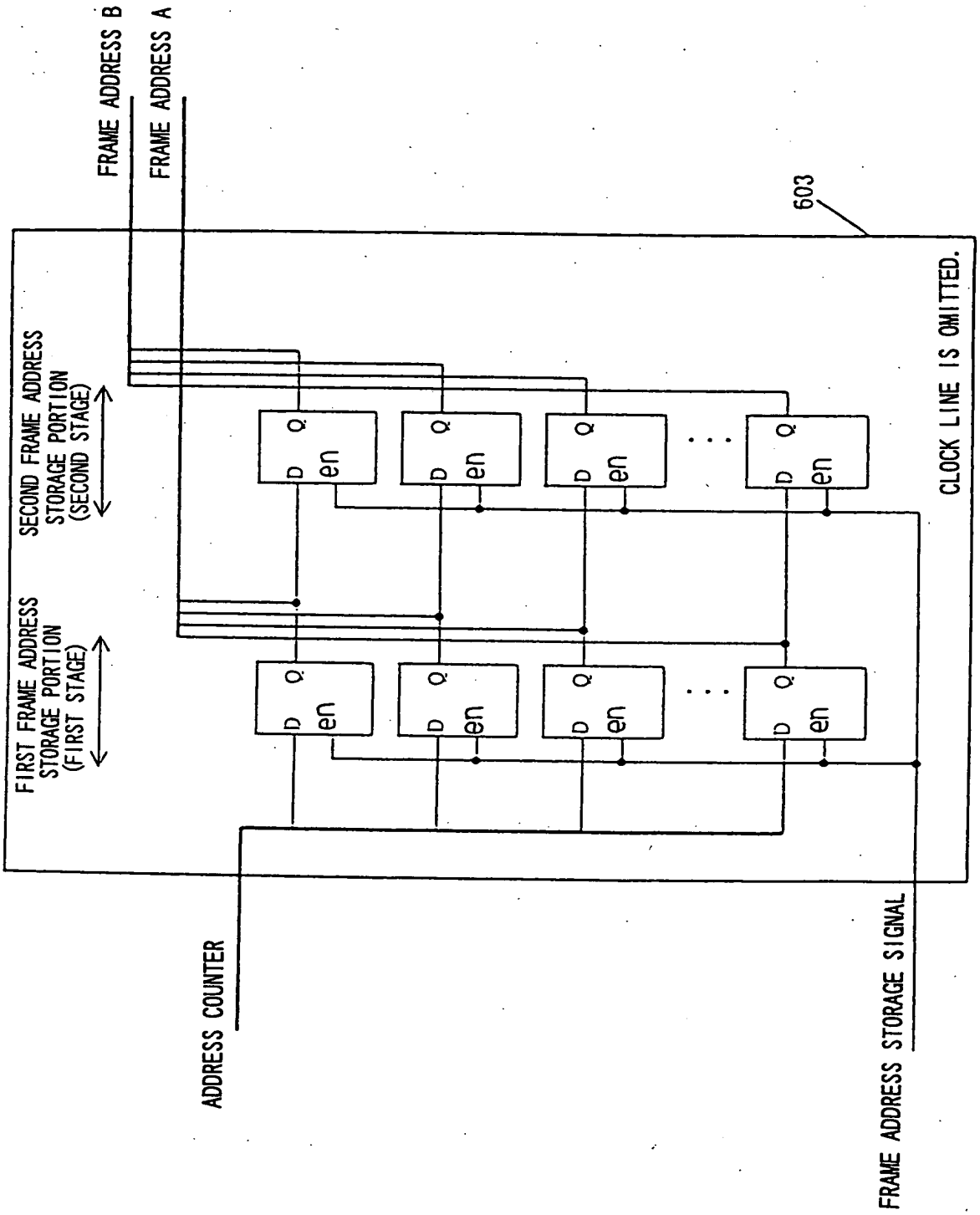

FRAME ADDRESS B
FRAME ADDRESS A
603
SECOND FRAME ADDRESS STORAGE PORTION (SECOND STAGE)
FIRST FRAME ADDRESS STORAGE PORTION (FIRST STAGE)
CLOCK LINE IS OMITTED.
D
Q
en
ADDRESS COUNTER
FRAME ADDRESS STORAGE SIGNAL

FIG. 8

FIG. 9

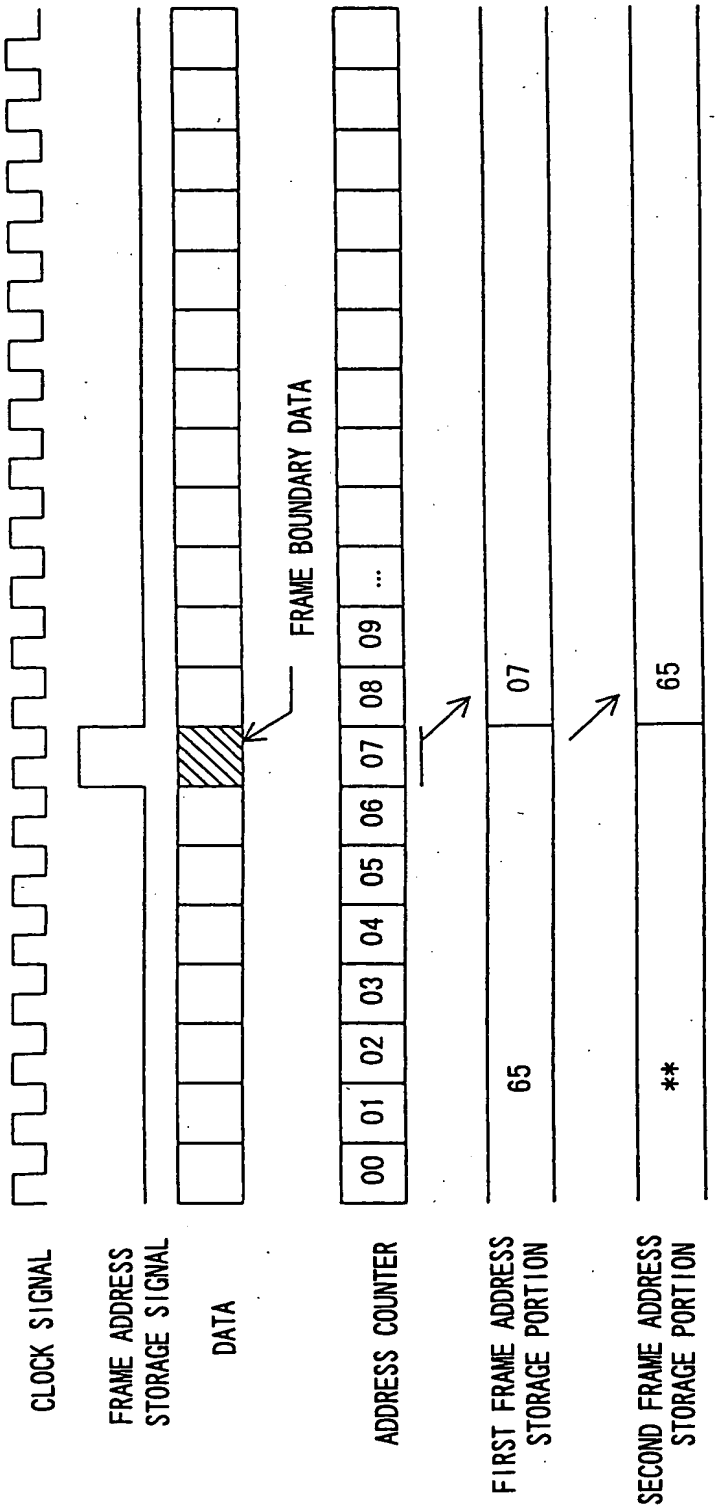
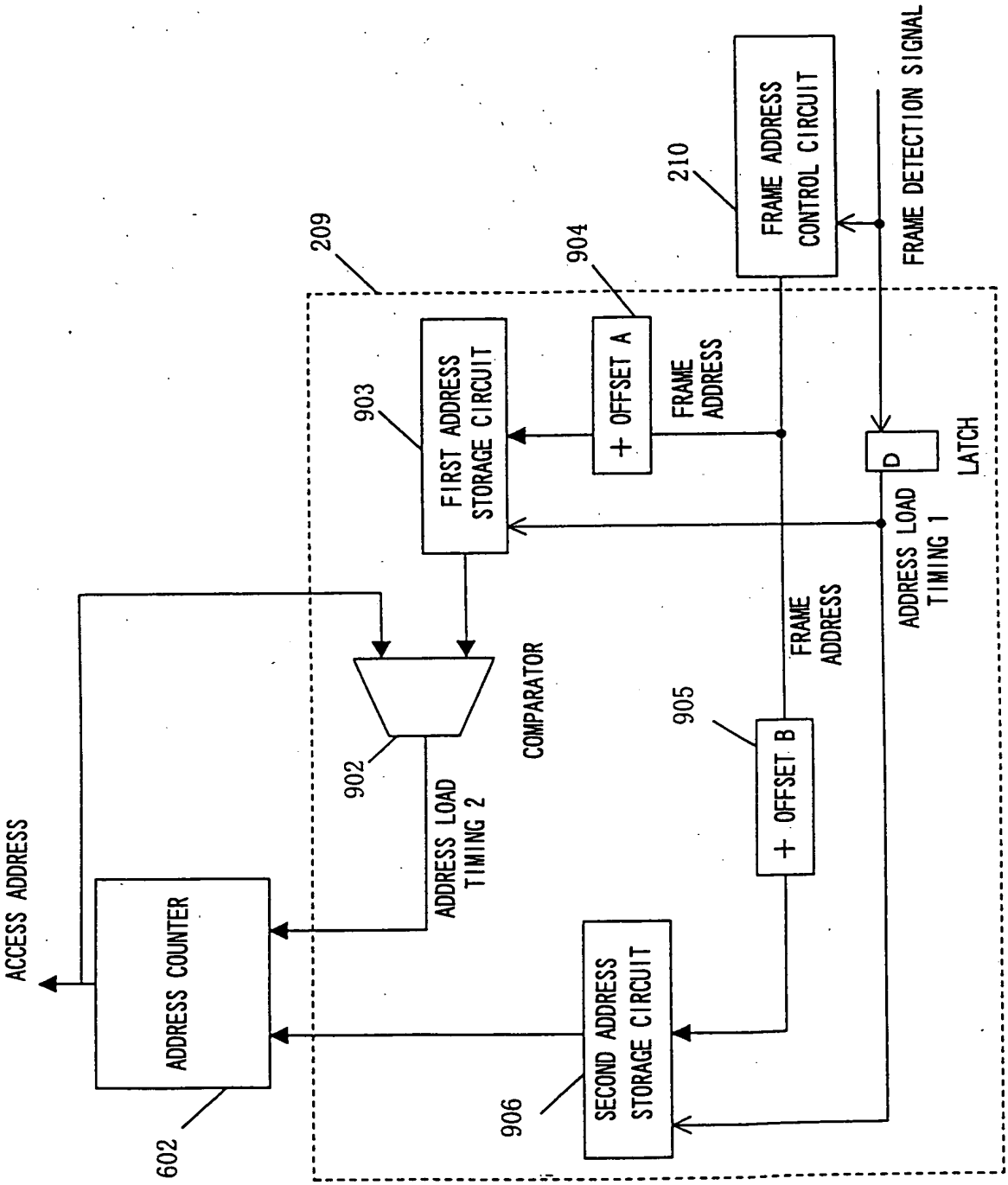

CLOCK SIGNAL
FRAME ADDRESS STORAGE SIGNAL
DATA
FRAME BOUNDARY DATA
ADDRESS COUNTER
00
01
02
03
04
05
06
07
08
09
...
FIRST FRAME ADDRESS STORAGE PORTION
65
07
SECOND FRAME ADDRESS STORAGE PORTION
**
65

FIG. 10


ACCESS ADDRESS
ADDRESS COUNTER
602
ADDRESS LOAD TIMING 2
902
COMPARATOR
209
903
FIRST ADDRESS STORAGE CIRCUIT
904
+ OFFSET A
FRAME ADDRESS
210
FRAME ADDRESS CONTROL CIRCUIT
FRAME DETECTION SIGNAL
D
LATCH
ADDRESS LOAD TIMING 1
FRAME ADDRESS
905
+ OFFSET B
906
SECOND ADDRESS STORAGE CIRCUIT

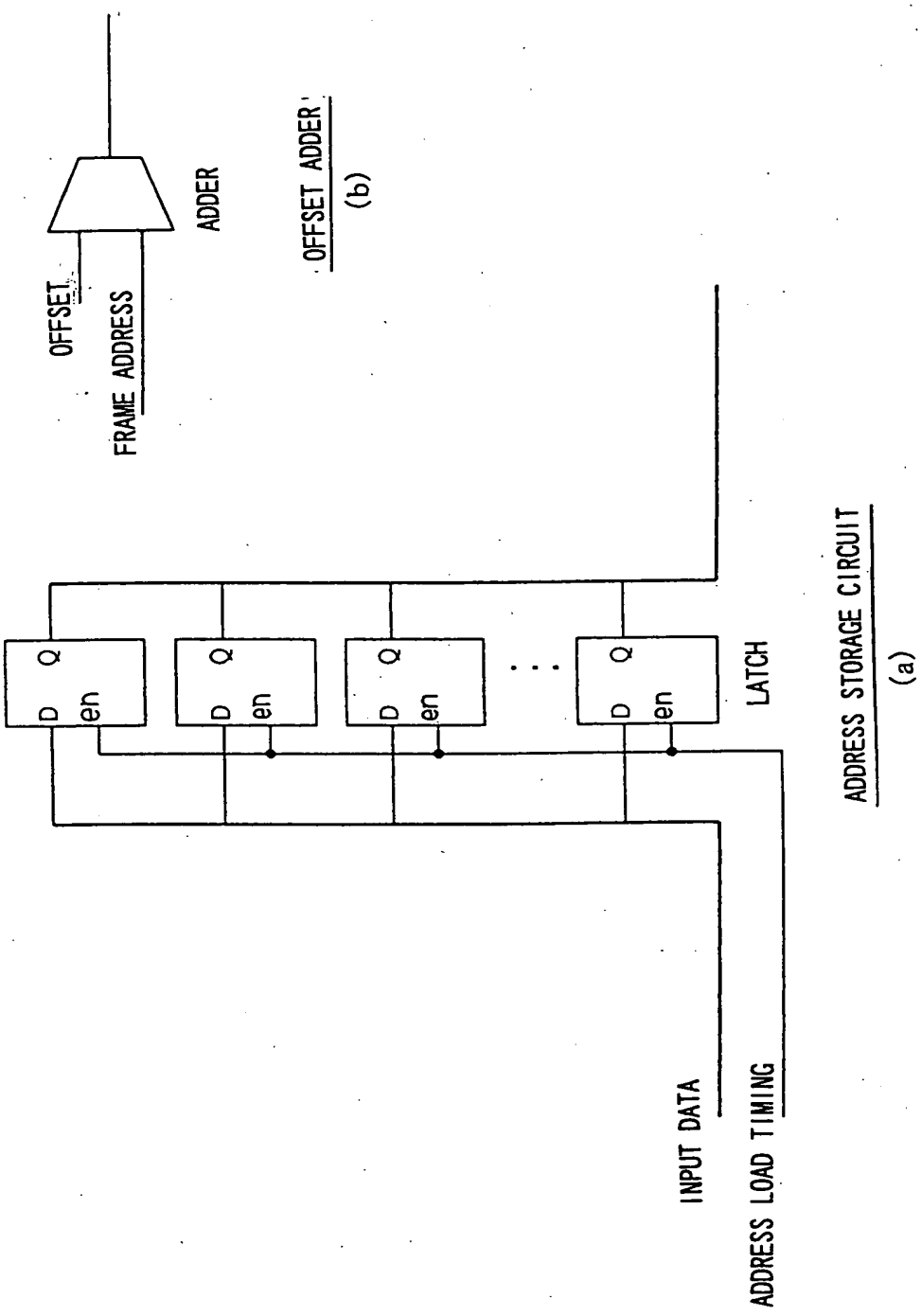
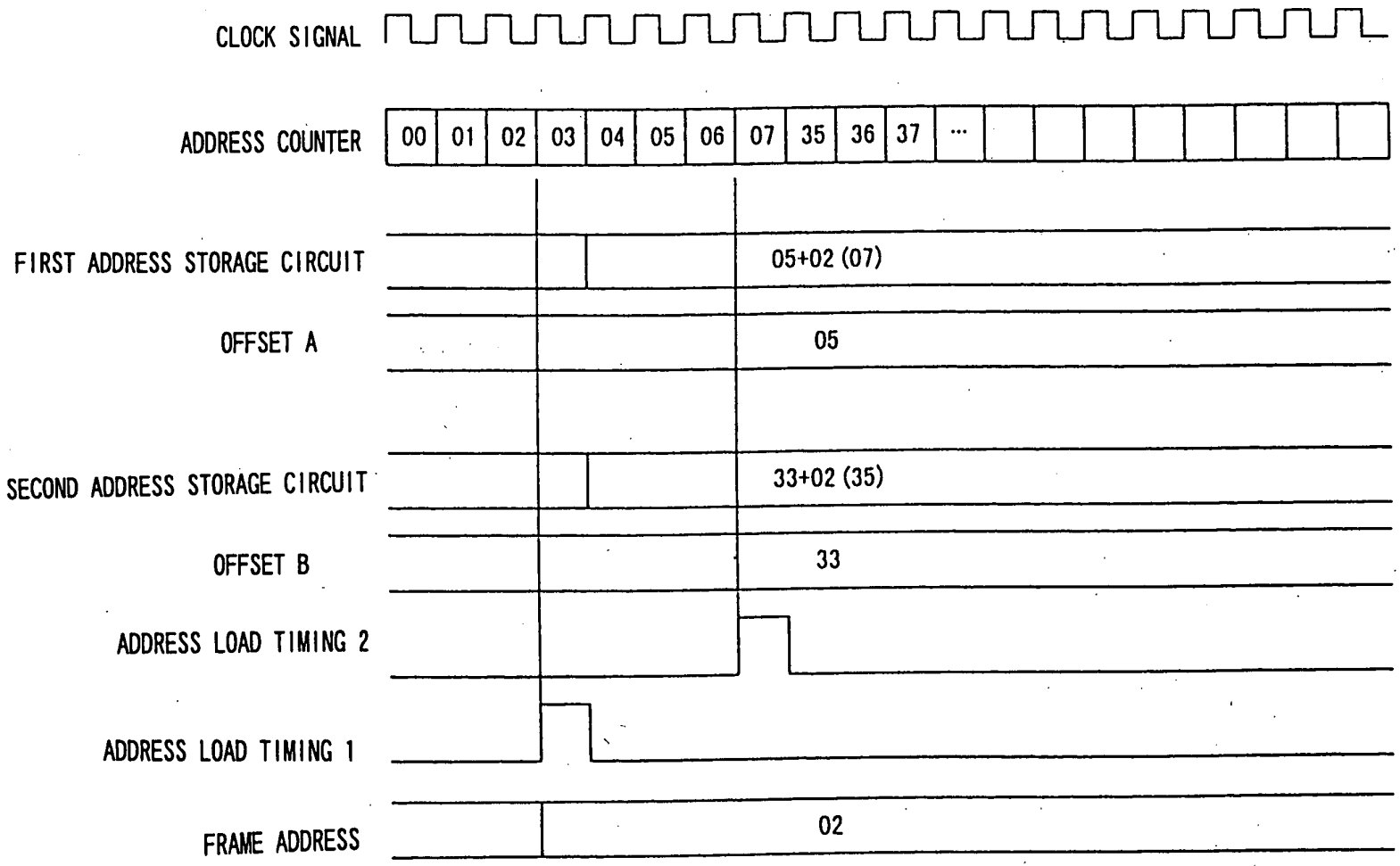

OFFSET
FRAME ADDRESS
ADDER
OFFSET ADDER
(b)
Q
D
en
LATCH
ADDRESS STORAGE CIRCUIT
(a)
INPUT DATA
ADDRESS LOAD TIMING

FIG. 11

FIG. 12



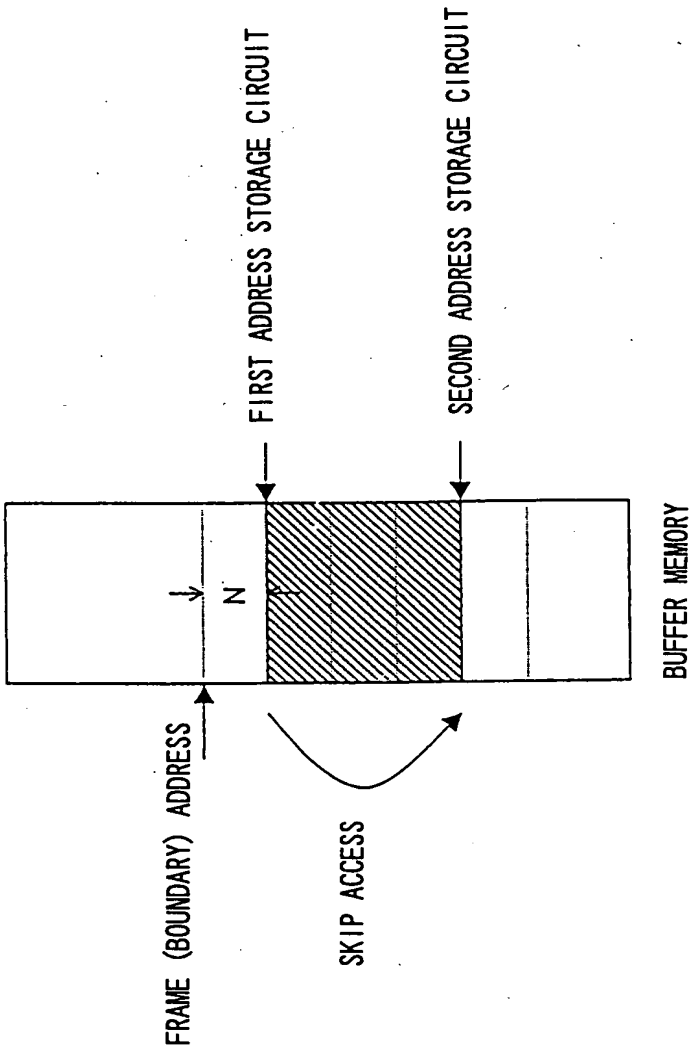

FIRST ADDRESS STORAGE CIRCUIT
SECOND ADDRESS STORAGE CIRCUIT
N
BUFFER MEMORY
FRAME (BOUNDARY) ADDRESS
SKIP ACCESS

FIG. 13

FIG. 14

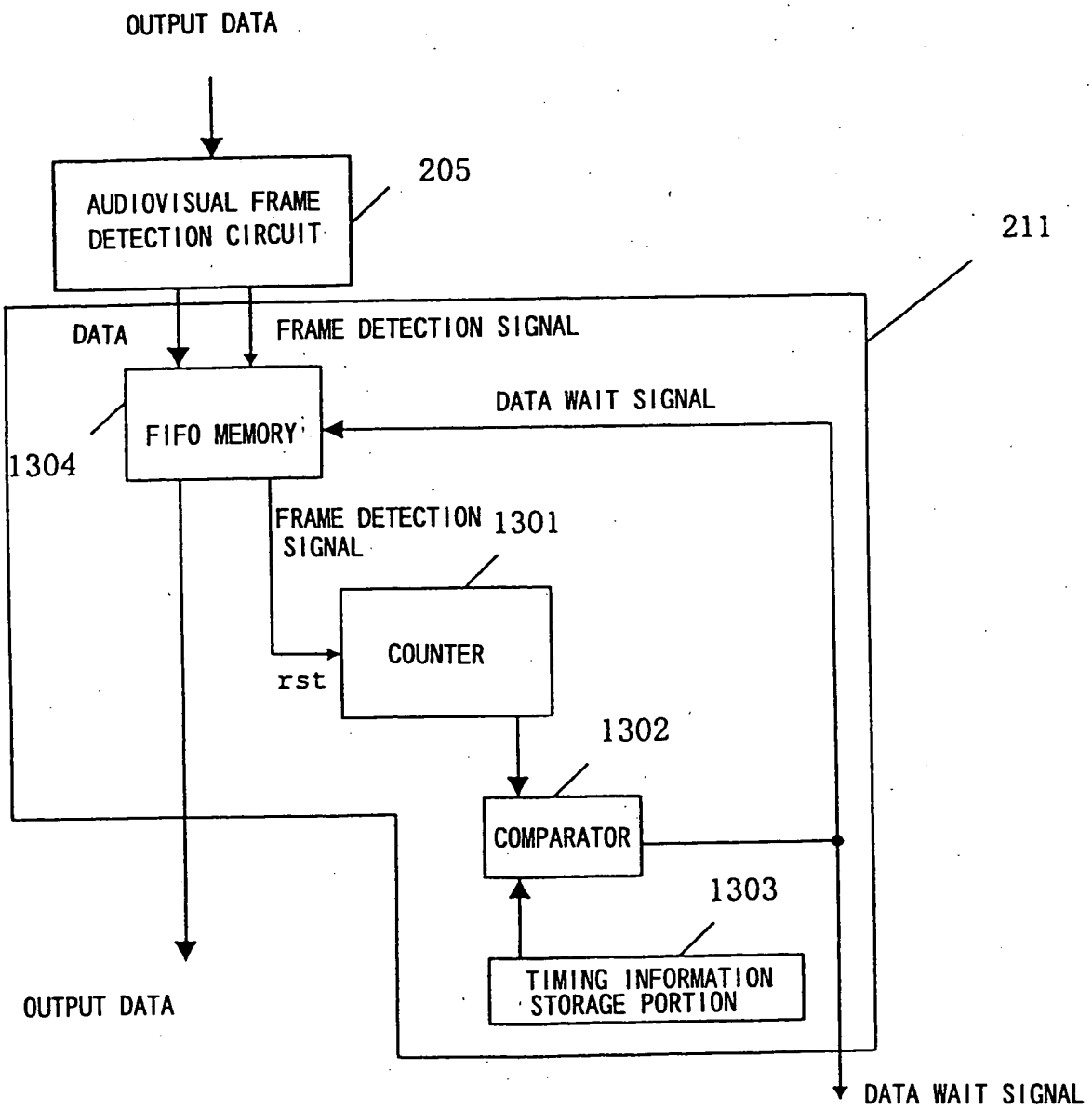
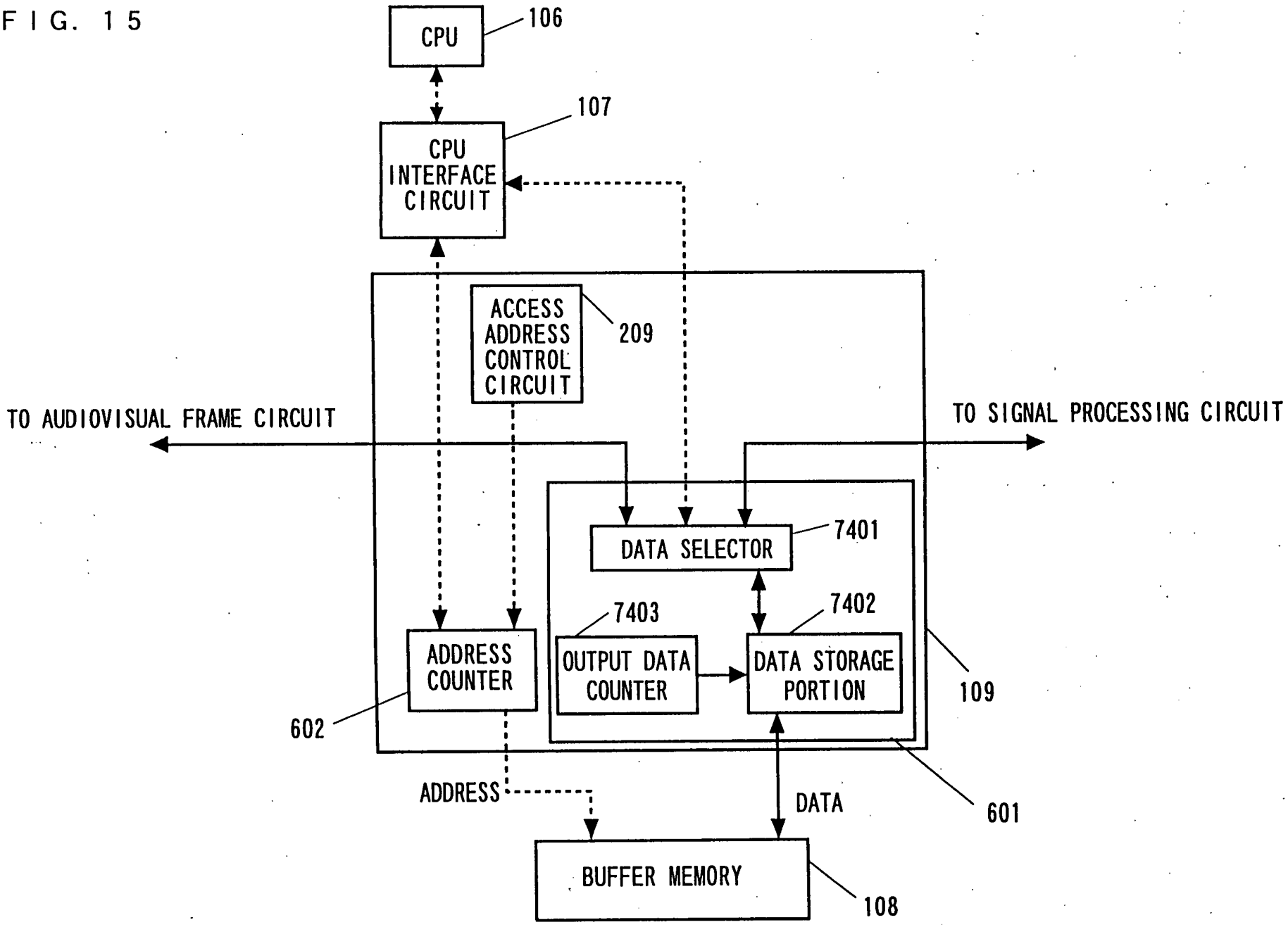

OUTPUT DATA
AUDIOVISUAL FRAME DETECTION CIRCUIT
205
211
DATA
FRAME DETECTION SIGNAL
DATA WAIT SIGNAL
FIFO MEMORY
1304
FRAME DETECTION SIGNAL
1301
COUNTER
rst
1302
COMPARATOR
1303
TIMING INFORMATION STORAGE PORTION
OUTPUT DATA
DATA WAIT SIGNAL

FIG. 15


CPU
106
107
CPU INTERFACE CIRCUIT
ACCESS ADDRESS CONTROL CIRCUIT
209
TO AUDIOVISUAL FRAME CIRCUIT
TO SIGNAL PROCESSING CIRCUIT
DATA SELECTOR
7401
7403
7402
ADDRESS COUNTER
OUTPUT DATA COUNTER
DATA STORAGE PORTION
109
602
ADDRESS
DATA
601
BUFFER MEMORY
108

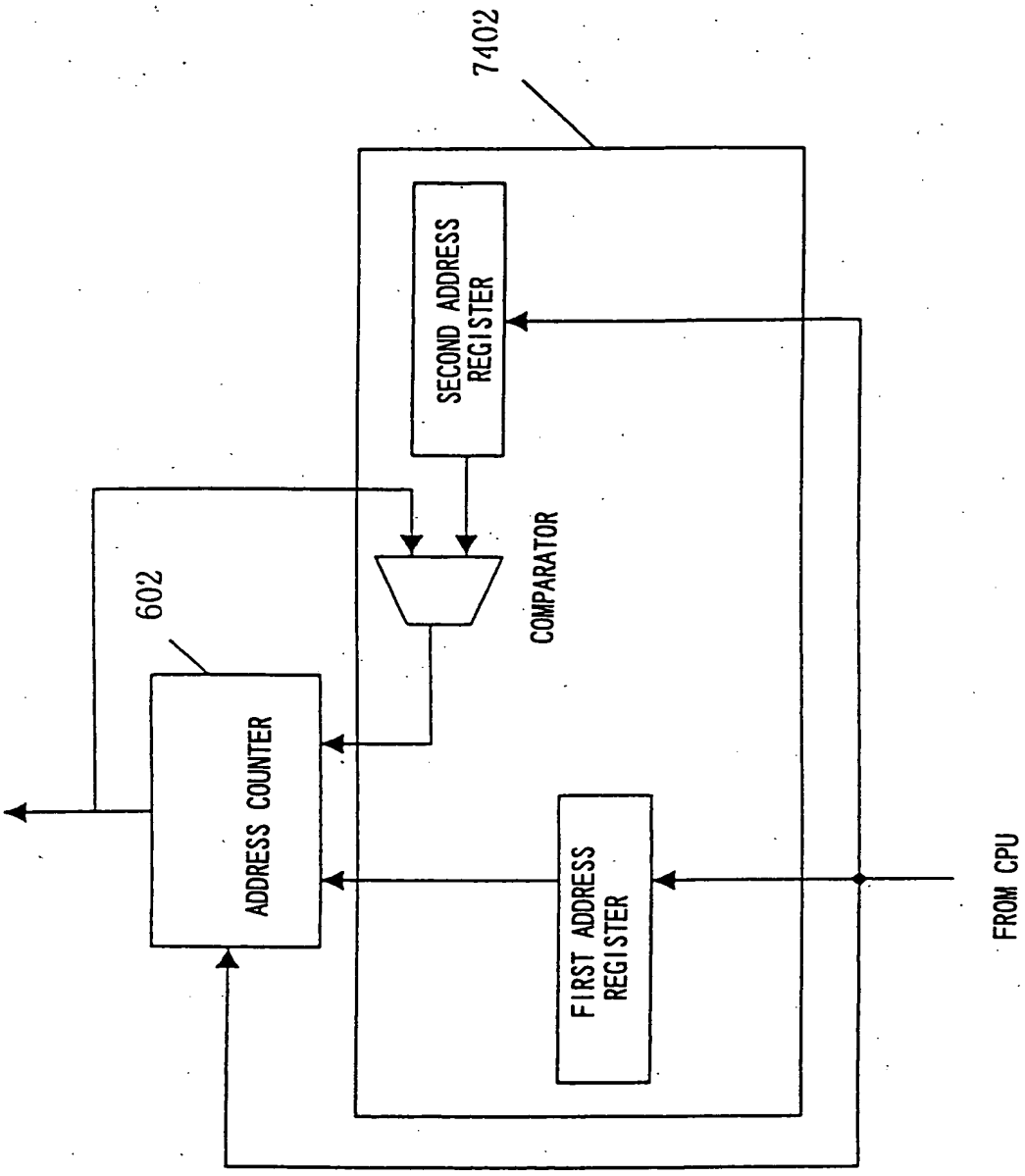

7402
SECOND ADDRESS REGISTER
COMPARATOR
602
ADDRESS COUNTER
FIRST ADDRESS REGISTER
FROM CPU

FIG. 16

FIG. 17

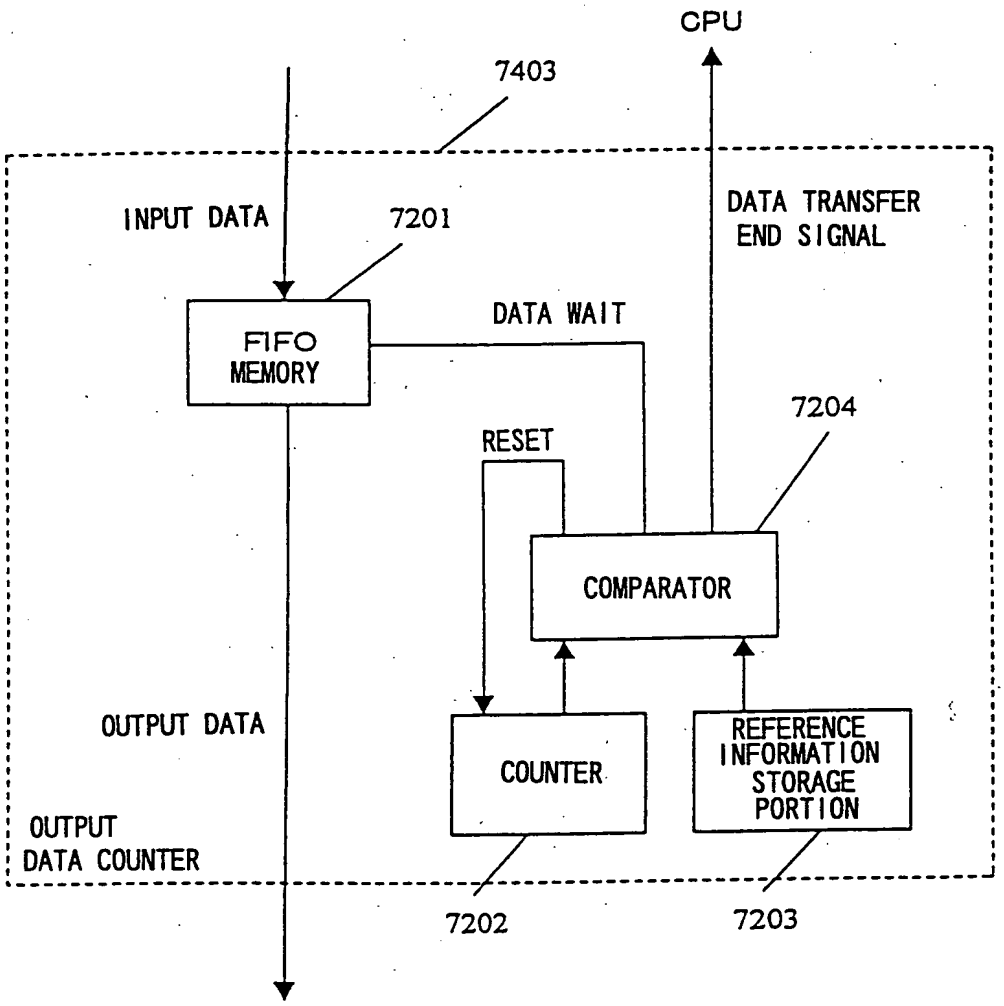
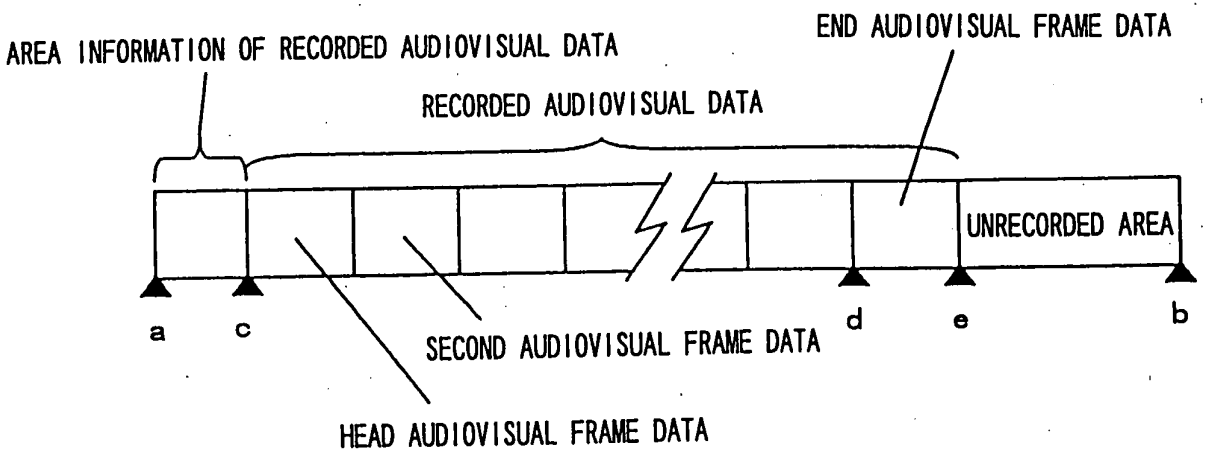

CPU
7403
INPUT DATA
7201
DATA TRANSFER
END SIGNAL
FIFO
MEMORY
DATA WAIT
7204
RESET
COMPARATOR
OUTPUT DATA
COUNTER
REFERENCE
INFORMATION
STORAGE
PORTION
OUTPUT
DATA COUNTER
7202
7203

FIG. 18



a. HEAD ADDRESS OF RECORDING AREA OF MAGNETIC DISK
b. END ADDRESS OF RECORDING AREA OF MAGNETIC DISK
c. RECORD START ADDRESS OF HEAD AUDIOVISUAL FRAME DATA
d. RECORD START ADDRESS OF END AUDIOVISUAL FRAME DATA
e. HEAD ADDRESS OF UNRECORDED AREA

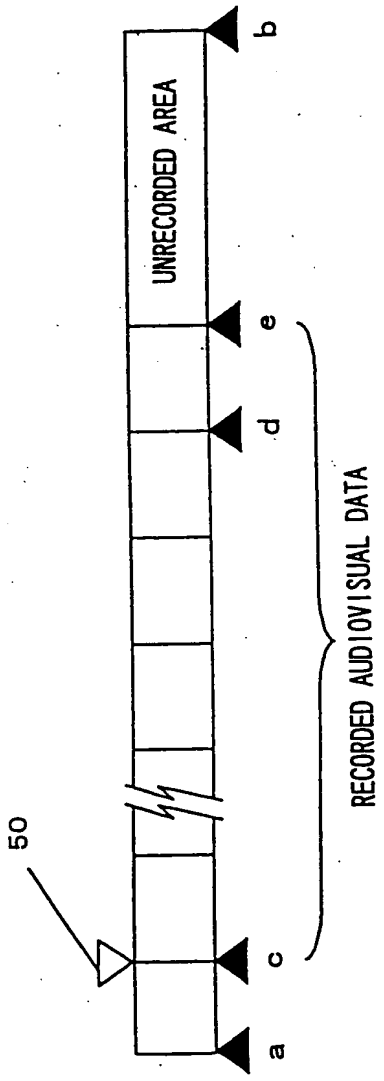


FIG. 19

FIG. 20

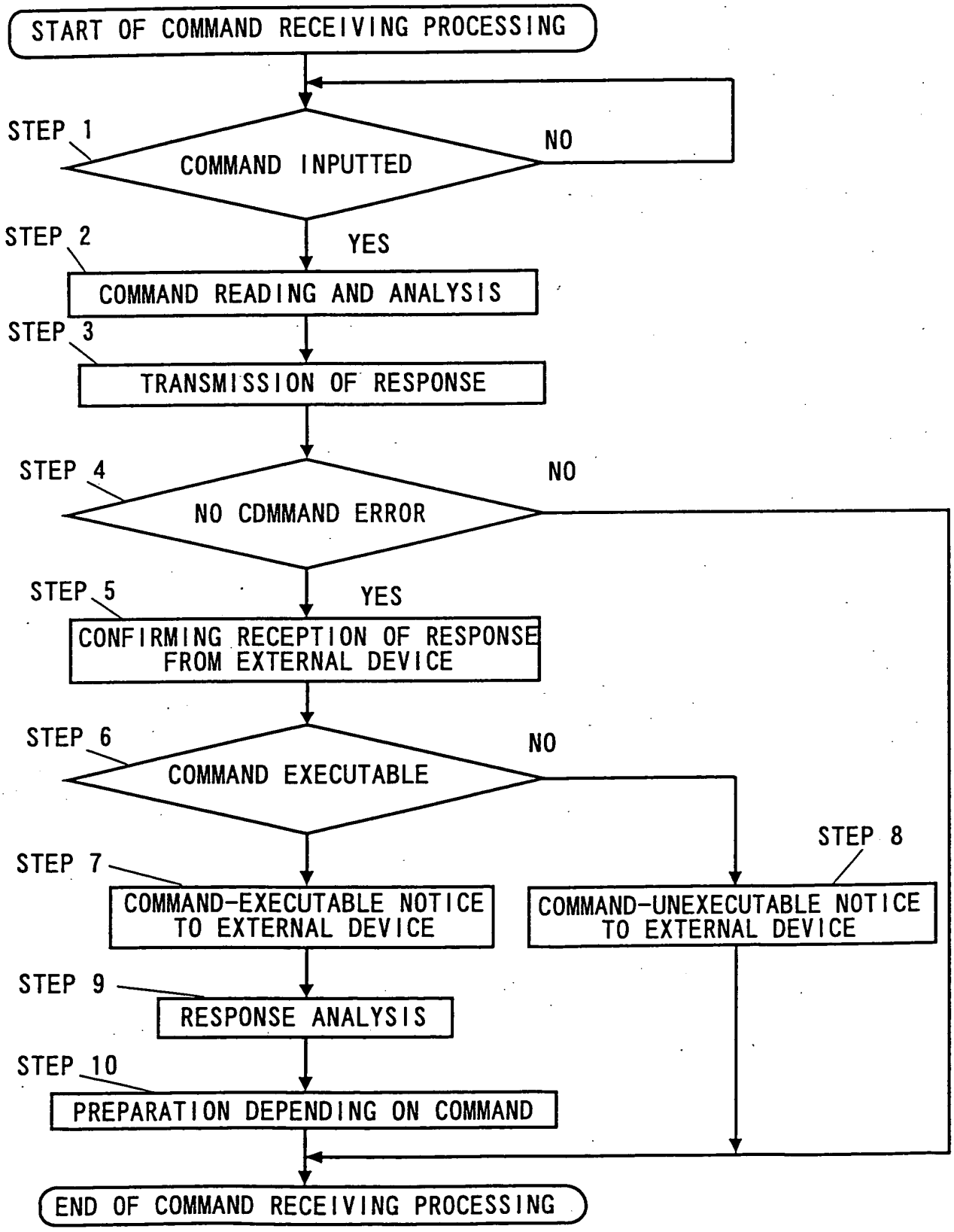

START OF COMMAND RECEIVING PROCESSING
STEP 1
COMMAND INPUTTED
NO
YES
STEP 2
COMMAND READING AND ANALYSIS
STEP 3
TRANSMISSION OF RESPONSE
STEP 4
NO CDMMAND ERROR
NO
YES
STEP 5
CONFIRMING RECEPTION OF RESPONSE FROM EXTERNAL DEVICE
STEP 6
COMMAND EXECUTABLE
NO
STEP 7
COMMAND-EXECUTABLE NOTICE TO EXTERNAL DEVICE
STEP 8
COMMAND-UNEXECUTABLE NOTICE TO EXTERNAL DEVICE
STEP 9
RESPONSE ANALYSIS
STEP 10
PREPARATION DEPENDING ON COMMAND
END OF COMMAND RECEIVING PROCESSING

FIG. 21

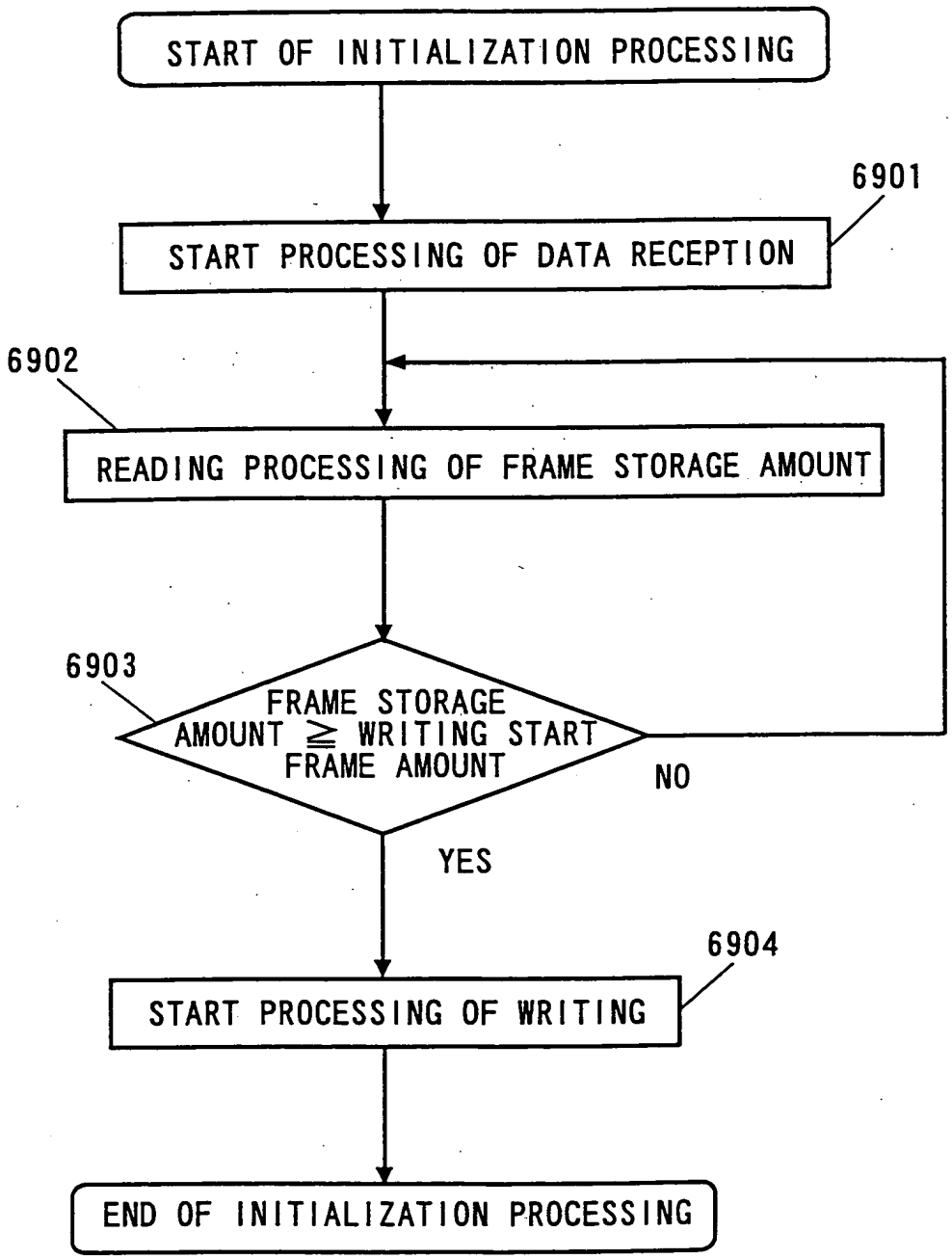

START OF INITIALIZATION PROCESSING
6901
START PROCESSING OF DATA RECEPTION
6902
READING PROCESSING OF FRAME STORAGE AMOUNT
6903
FRAME STORAGE AMOUNT ≧ WRITING START FRAME AMOUNT
NO
YES
6904
START PROCESSING OF WRITING
END OF INITIALIZATION PROCESSING

FIG. 22

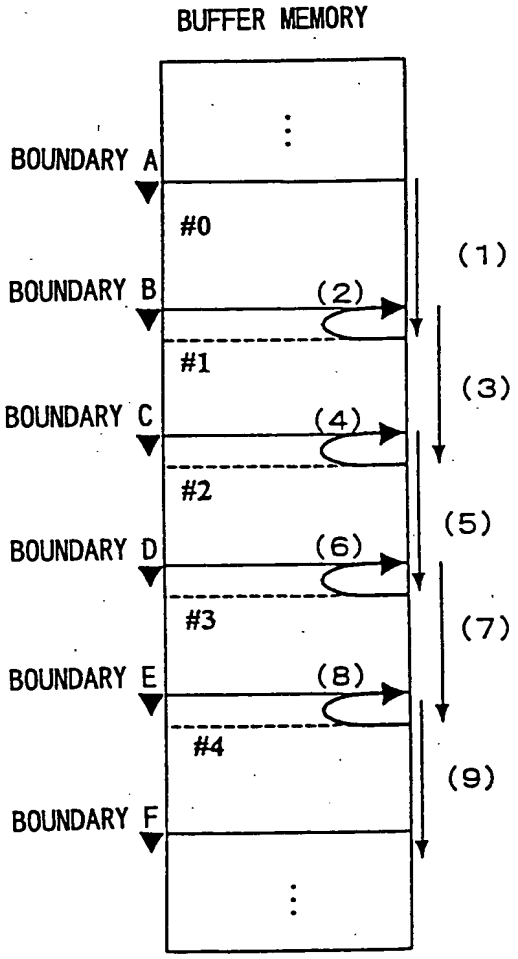
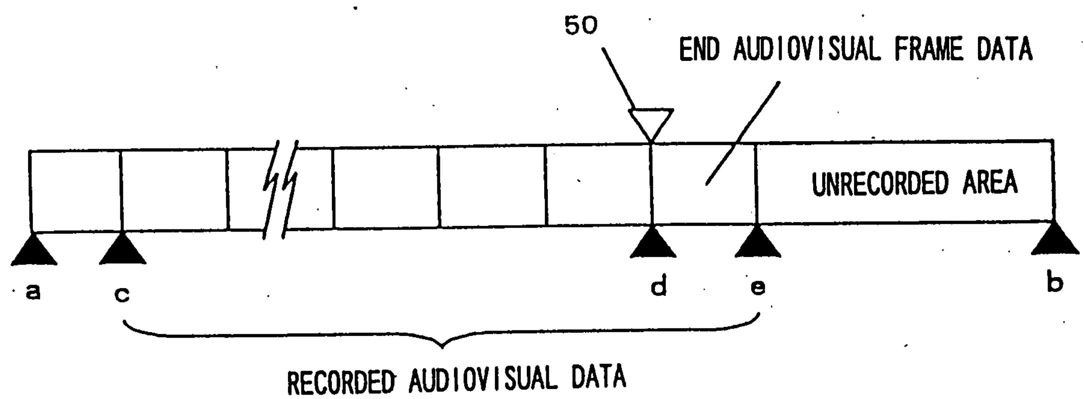

BUFFER MEMORY
BOUNDARY A
#0
BOUNDARY B
(1)
(2)
#1
(3)
BOUNDARY C
(4)
#2
(5)
BOUNDARY D
(6)
#3
(7)
BOUNDARY E
(8)
#4
(9)
BOUNDARY F

FIG. 23



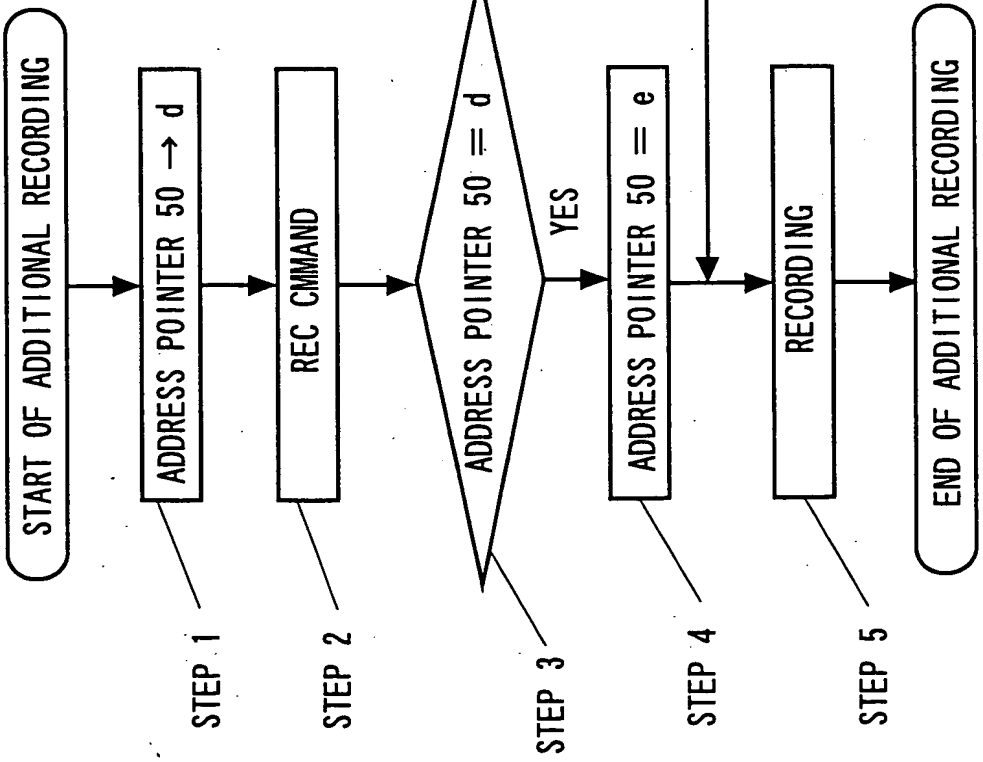

START OF ADDITIONAL RECORDING
ADDRESS POINTER 50 → d
REC CMMAND
ADDRESS POINTER 50 = d
NO
YES
ADDRESS POINTER 50 = e
RECORDING
END OF ADDITIONAL RECORDING
STEP 1
STEP 2
STEP 3
STEP 4
STEP 5

FIG. 24

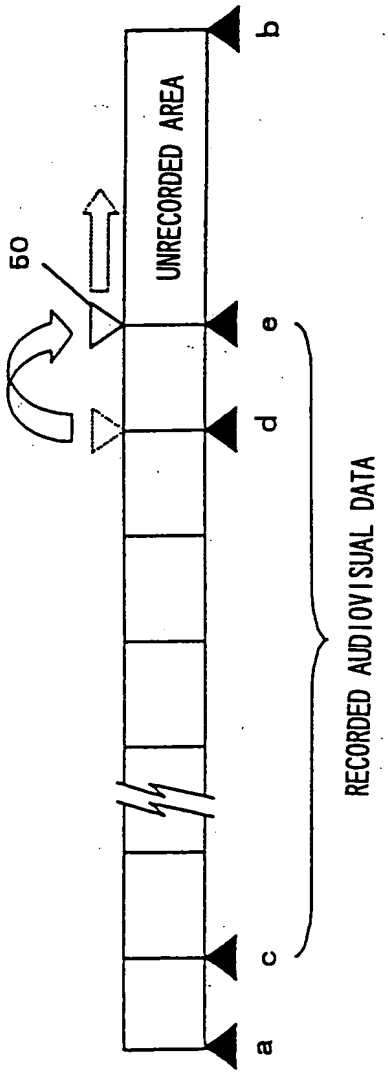


FIG. 25

FIG. 26

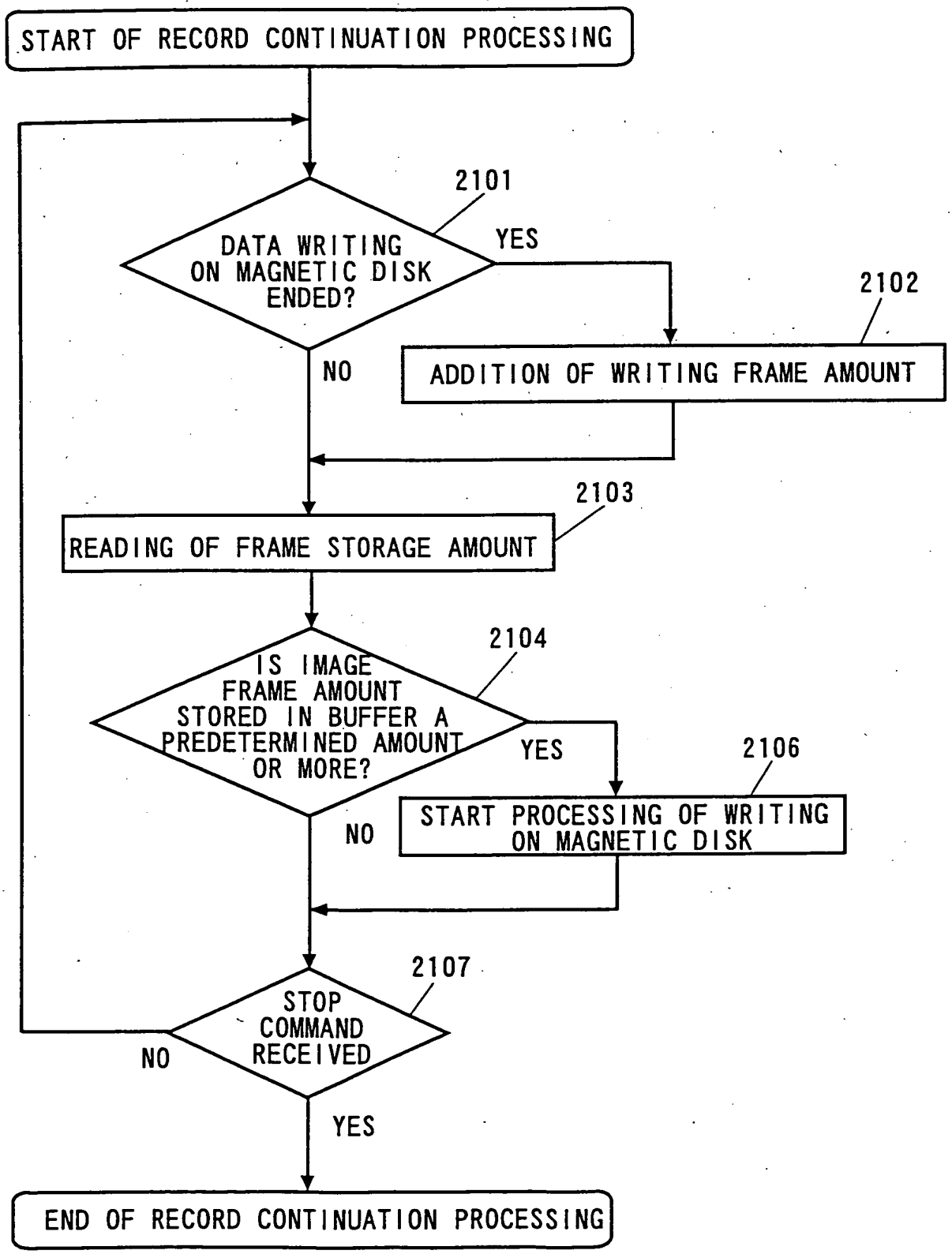
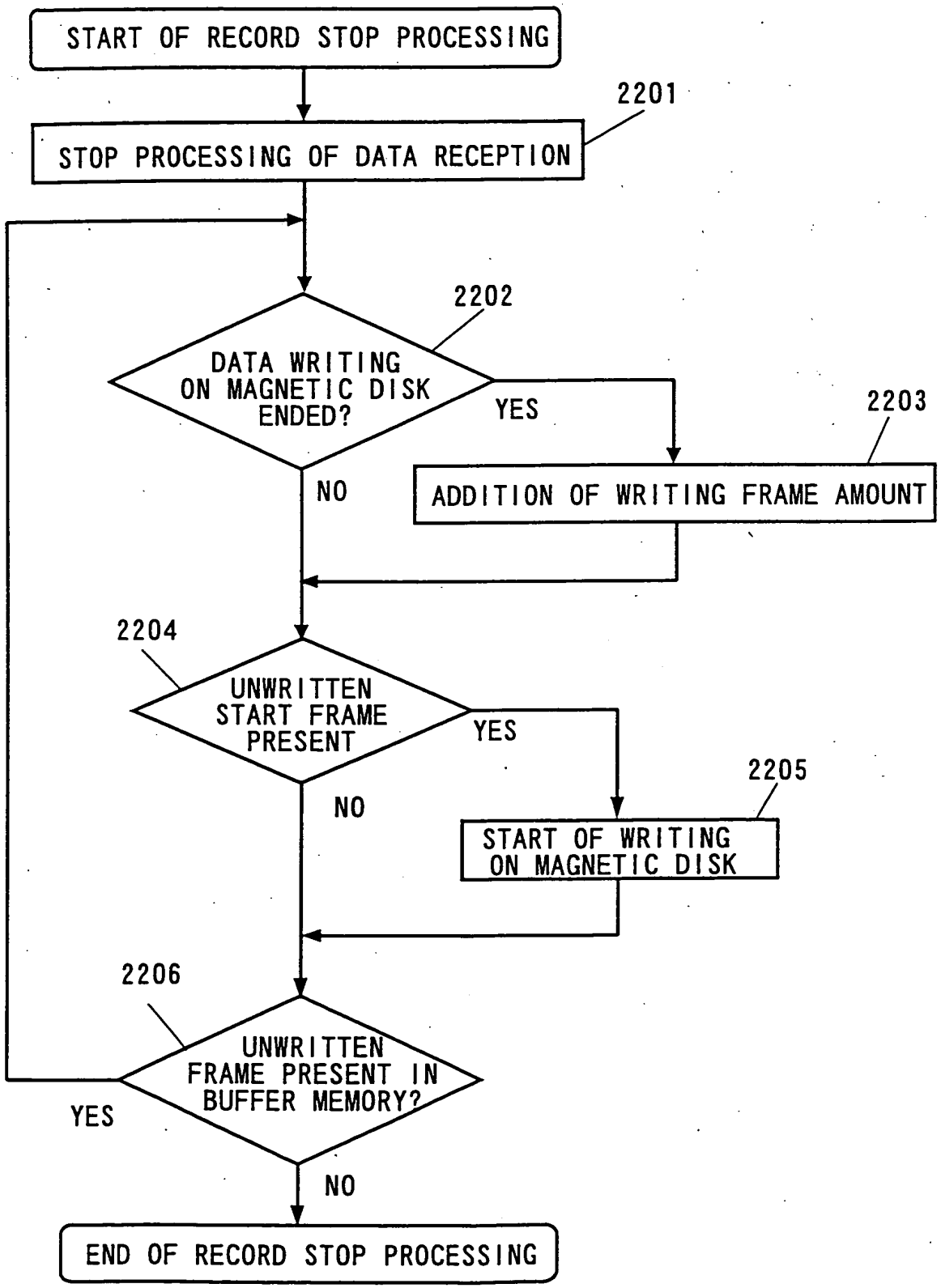

START OF RECORD CONTINUATION PROCESSING
2101
DATA WRITING ON MAGNETIC DISK ENDED?
YES
NO
2102
ADDITION OF WRITING FRAME AMOUNT
2103
READING OF FRAME STORAGE AMOUNT
2104
IS IMAGE FRAME AMOUNT STORED IN BUFFER A PREDETERMINED AMOUNT OR MORE?
YES
NO
2106
START PROCESSING OF WRITING ON MAGNETIC DISK
2107
STOP COMMAND RECEIVED
NO
YES
END OF RECORD CONTINUATION PROCESSING

FIG. 27


START OF RECORD STOP PROCESSING
2201
STOP PROCESSING OF DATA RECEPTION
2202
DATA WRITING ON MAGNETIC DISK ENDED?
YES
2203
ADDITION OF WRITING FRAME AMOUNT
NO
2204
UNWRITTEN START FRAME PRESENT
YES
2205
START OF WRITING ON MAGNETIC DISK
NO
2206
UNWRITTEN FRAME PRESENT IN BUFFER MEMORY?
YES
NO
END OF RECORD STOP PROCESSING

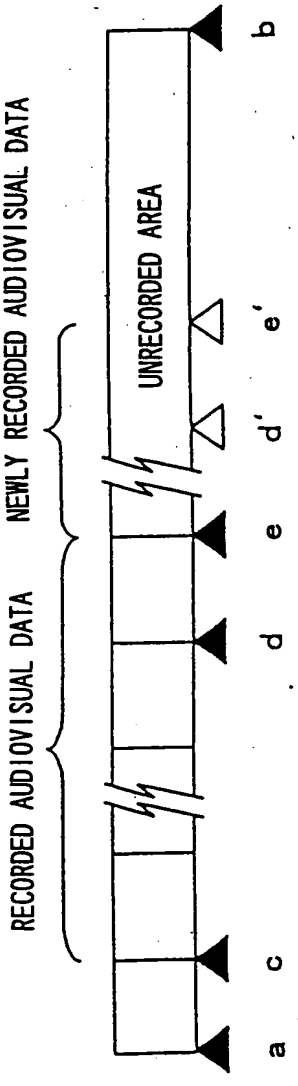

RECORDED AUDIOVISUAL DATA
NEWLY RECORDED AUDIOVISUAL DATA
UNRECORDED AREA
a
c
d
e
d'
e'
b

FIG. 28

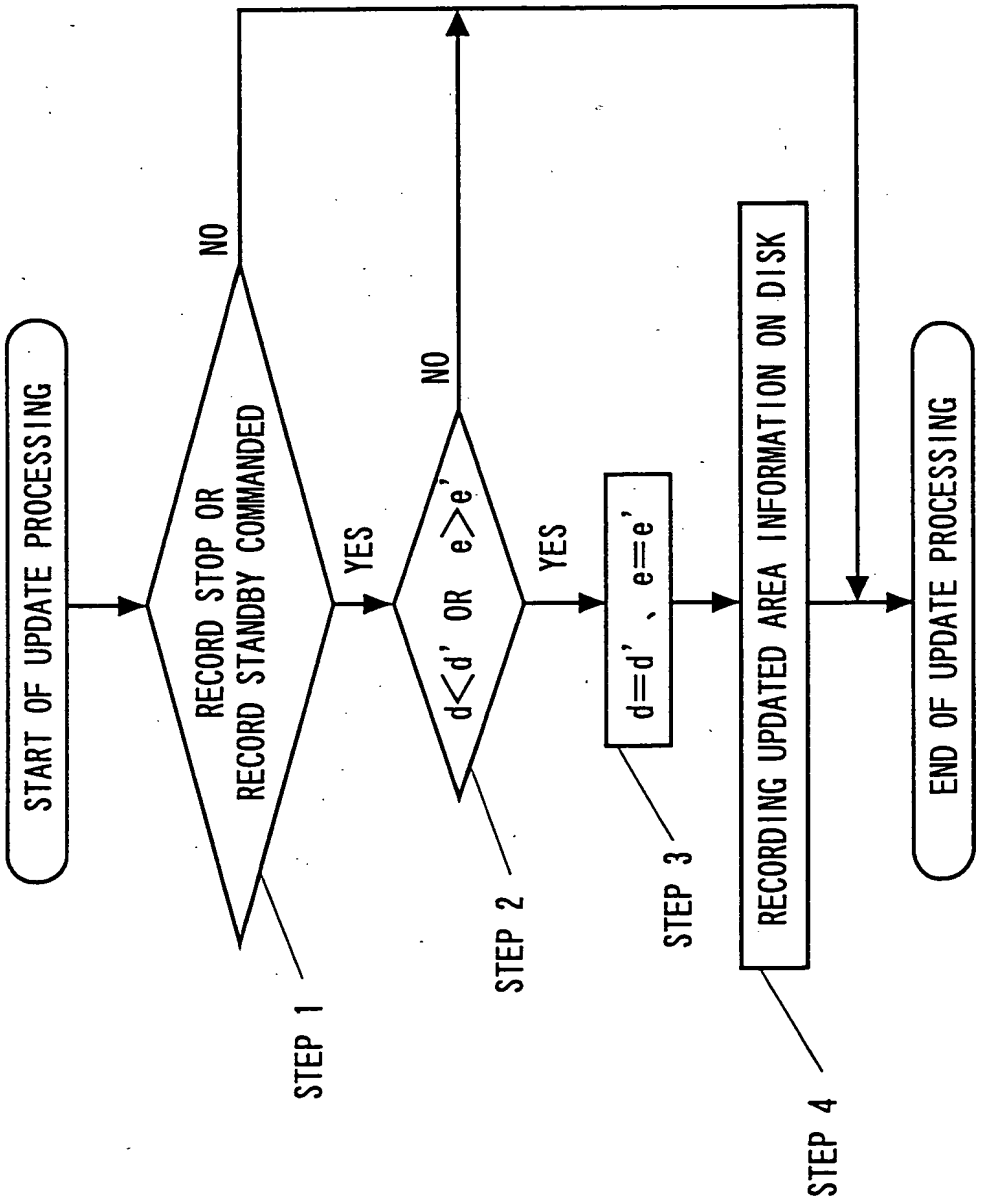

START OF UPDATE PROCESSING
RECORD STOP OR
RECORD STANDBY COMMANDED
NO
YES
STEP 1
d<d' OR e>e'
NO
YES
STEP 2
d=d' 、e=e'
STEP 3
RECORDING UPDATED AREA INFORMATION ON DISK
STEP 4
END OF UPDATE PROCESSING

FIG. 29

FIG. 30

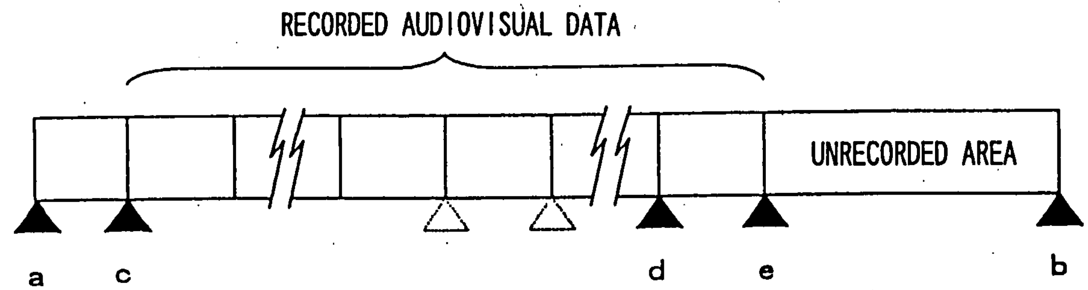


FIG. 31

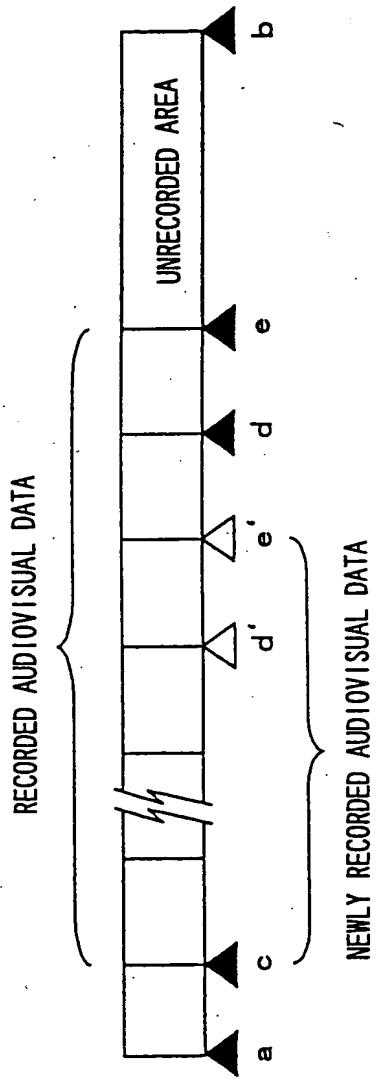

RECORDED AUDIOVISUAL DATA
UNRECORDED AREA
a
c
d'
e'
d
e
b
NEWLY RECORDED AUDIOVISUAL DATA

FIG. 32

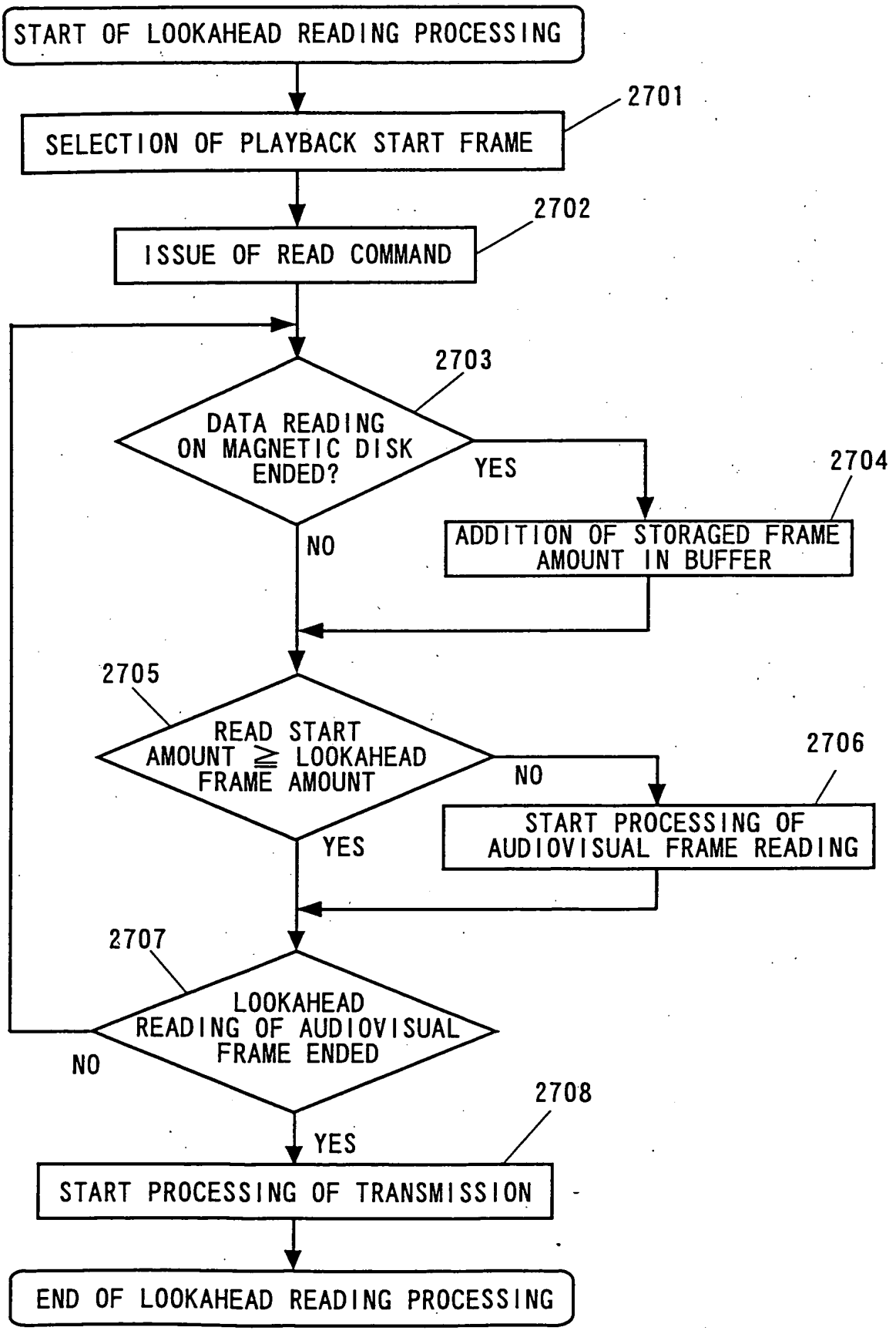

START OF LOOKAHEAD READING PROCESSING
2701
SELECTION OF PLAYBACK START FRAME
2702
ISSUE OF READ COMMAND
2703
DATA READING ON MAGNETIC DISK ENDED?
YES
NO
2704
ADDITION OF STORAGED FRAME AMOUNT IN BUFFER
2705
READ START AMOUNT ≧ LOOKAHEAD FRAME AMOUNT
NO
YES
2706
START PROCESSING OF AUDIOVISUAL FRAME READING
2707
LOOKAHEAD READING OF AUDIOVISUAL FRAME ENDED
NO
YES
2708
START PROCESSING OF TRANSMISSION
END OF LOOKAHEAD READING PROCESSING

FIG. 33

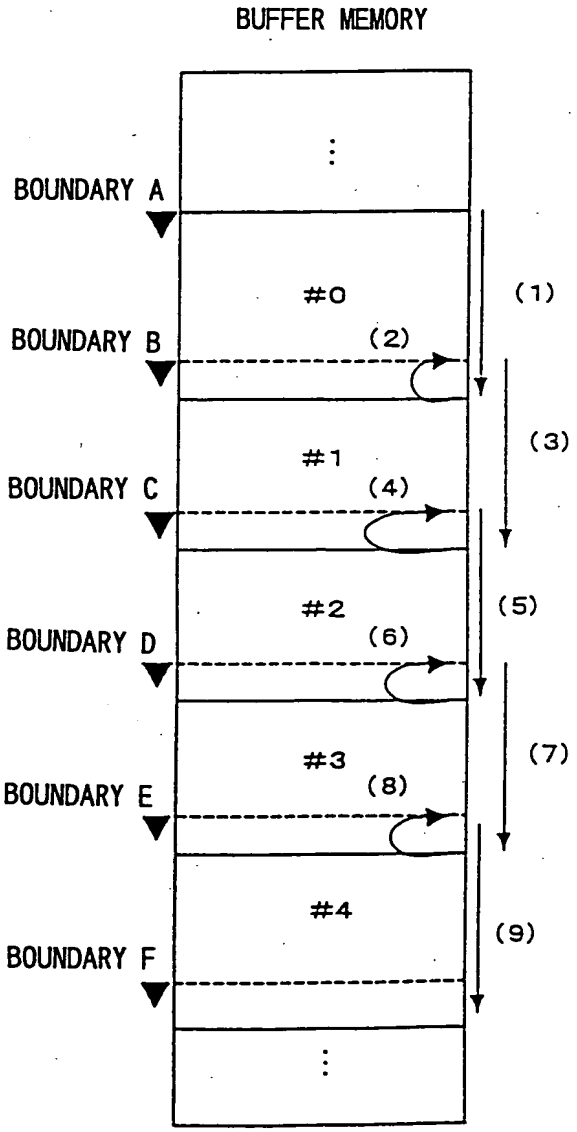

BUFFER MEMORY
BOUNDARY A
BOUNDARY B
BOUNDARY C
BOUNDARY D
BOUNDARY E
BOUNDARY F
#0
#1
#2
#3
#4
(1)
(2)
(3)
(4)
(5)
(6)
(7)
(8)
(9)

FIG. 34

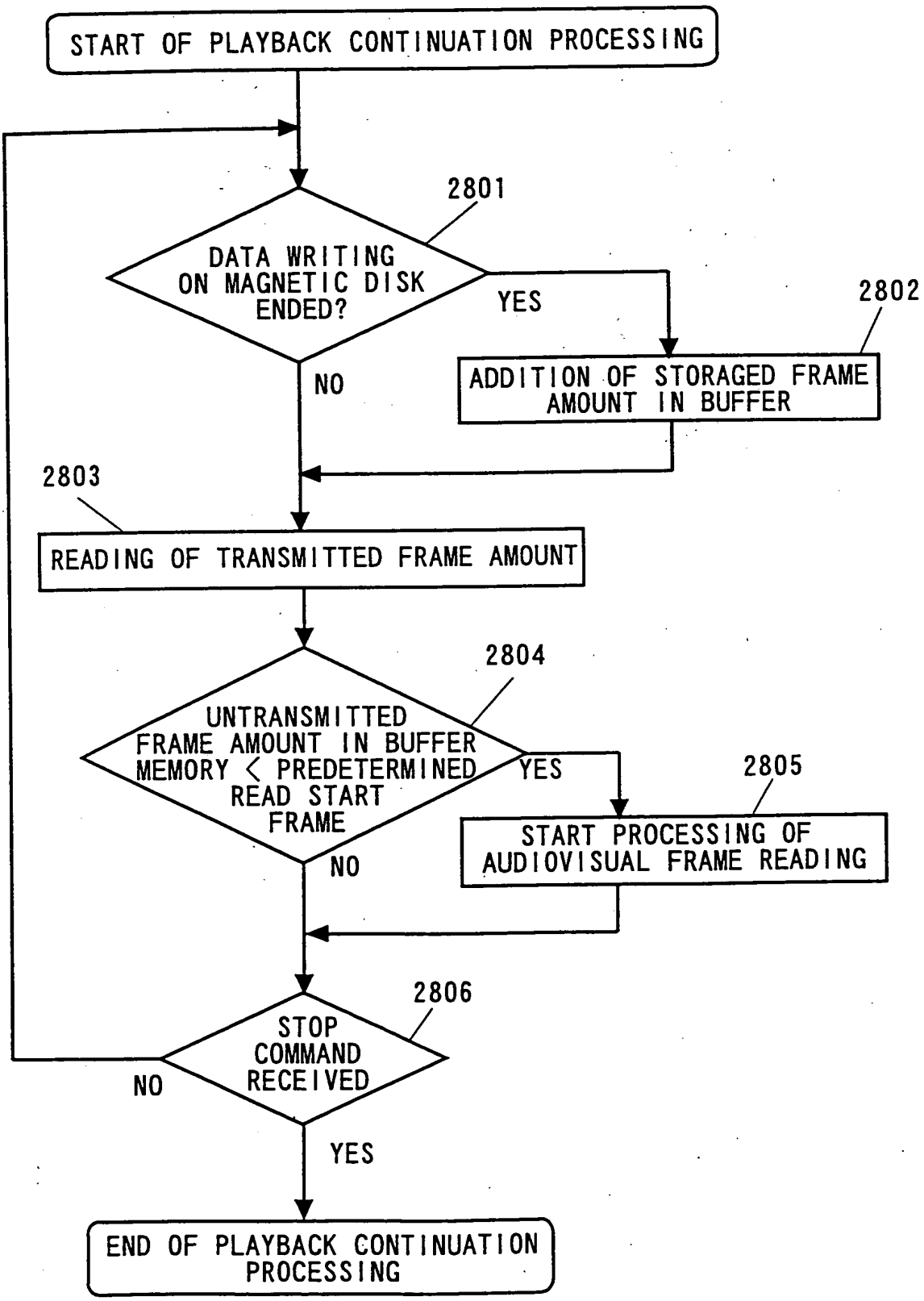

START OF PLAYBACK CONTINUATION PROCESSING
2801
DATA WRITING ON MAGNETIC DISK ENDED?
YES
NO
2802
ADDITION OF STORAGED FRAME AMOUNT IN BUFFER
2803
READING OF TRANSMITTED FRAME AMOUNT
2804
UNTRANSMITTED FRAME AMOUNT IN BUFFER MEMORY < PREDETERMINED READ START FRAME
YES
NO
2805
START PROCESSING OF AUDIOVISUAL FRAME READING
2806
STOP COMMAND RECEIVED
NO
YES
END OF PLAYBACK CONTINUATION PROCESSING

FIG. 35

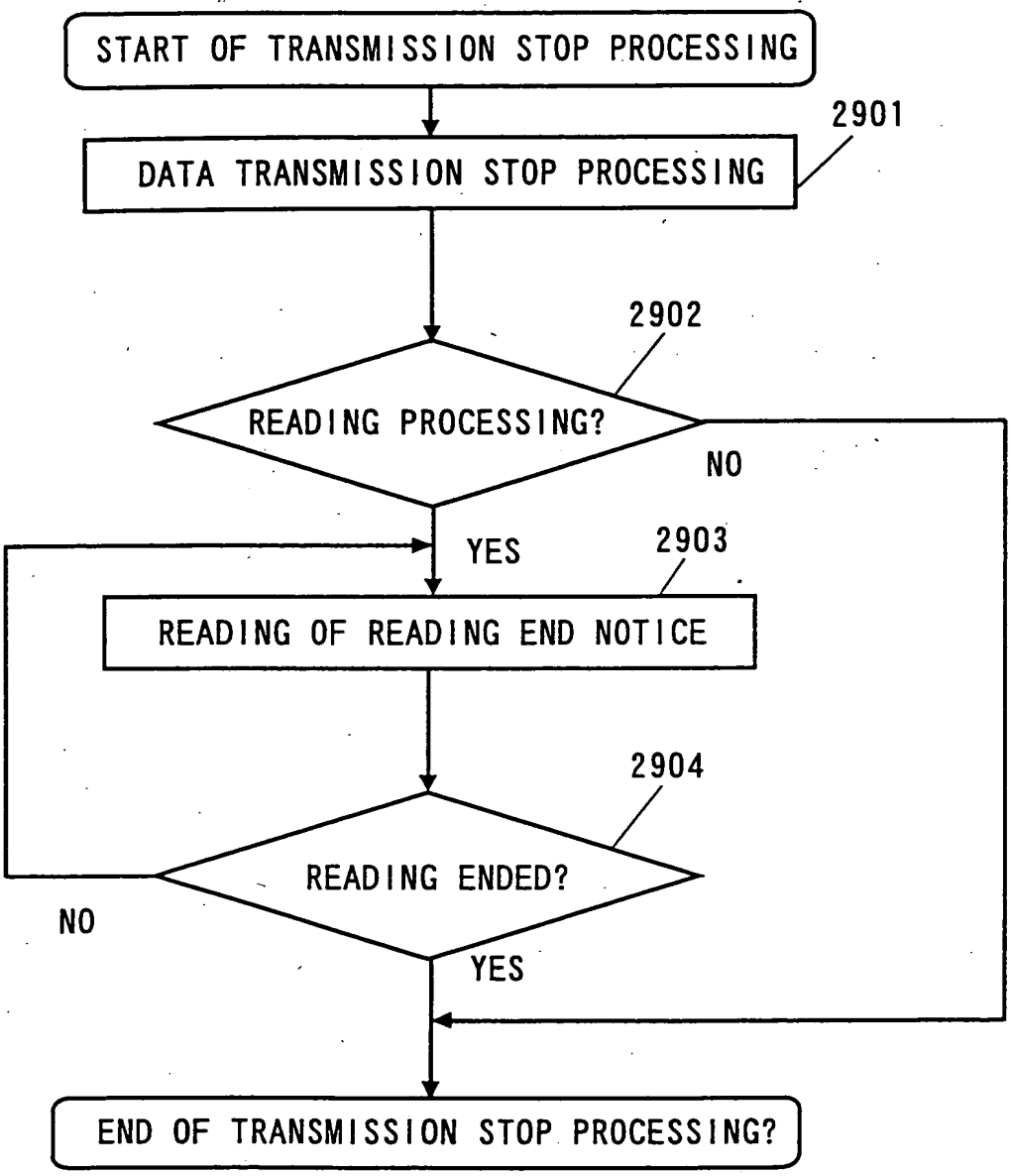

START OF TRANSMISSION STOP PROCESSING
2901
DATA TRANSMISSION STOP PROCESSING
2902
READING PROCESSING?
NO
YES
2903
READING OF READING END NOTICE
2904
READING ENDED?
NO
YES
END OF TRANSMISSION STOP PROCESSING?

FIG. 36 FORWARD DIRECTION/NORMAL-SPEED PLAYBACK

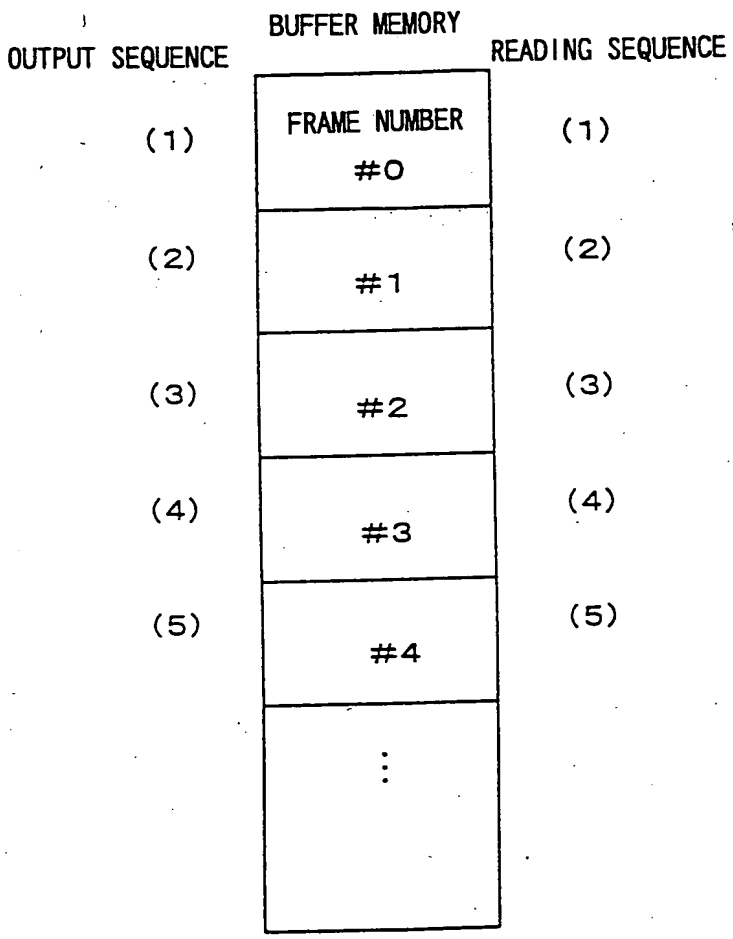


FIG. 37

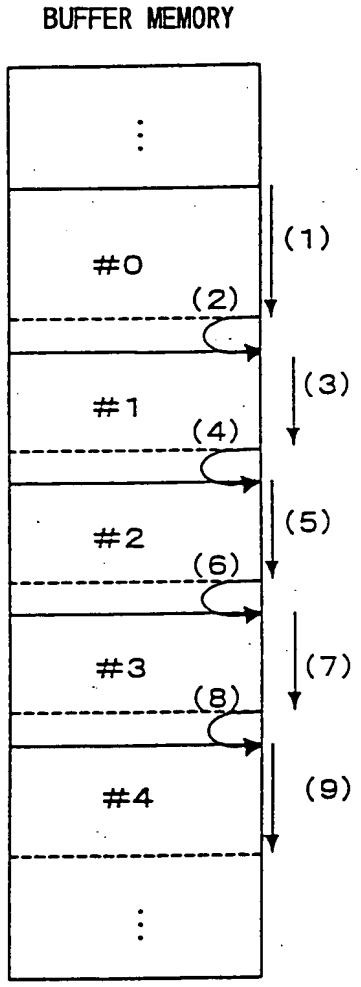


FIG. 38 FORWARD DIRECTION/HIGH-SPEED PLAYBACK

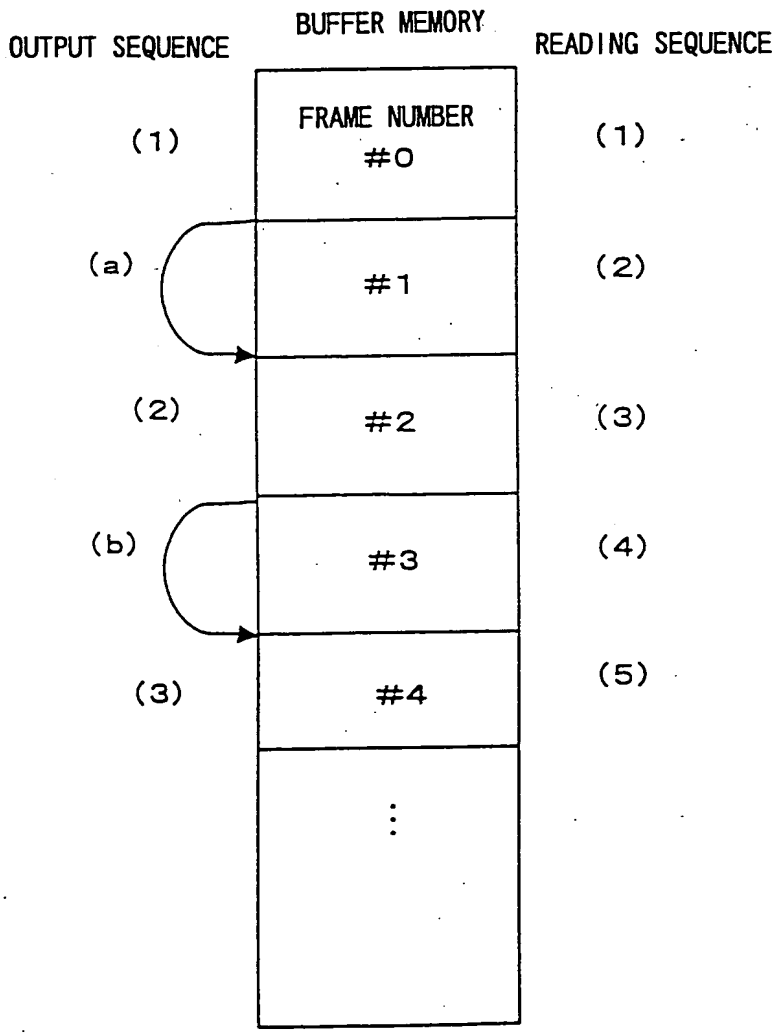


FIG. 39 FORWARD DIRECTION/HIGH-SPEED PLAYBACK

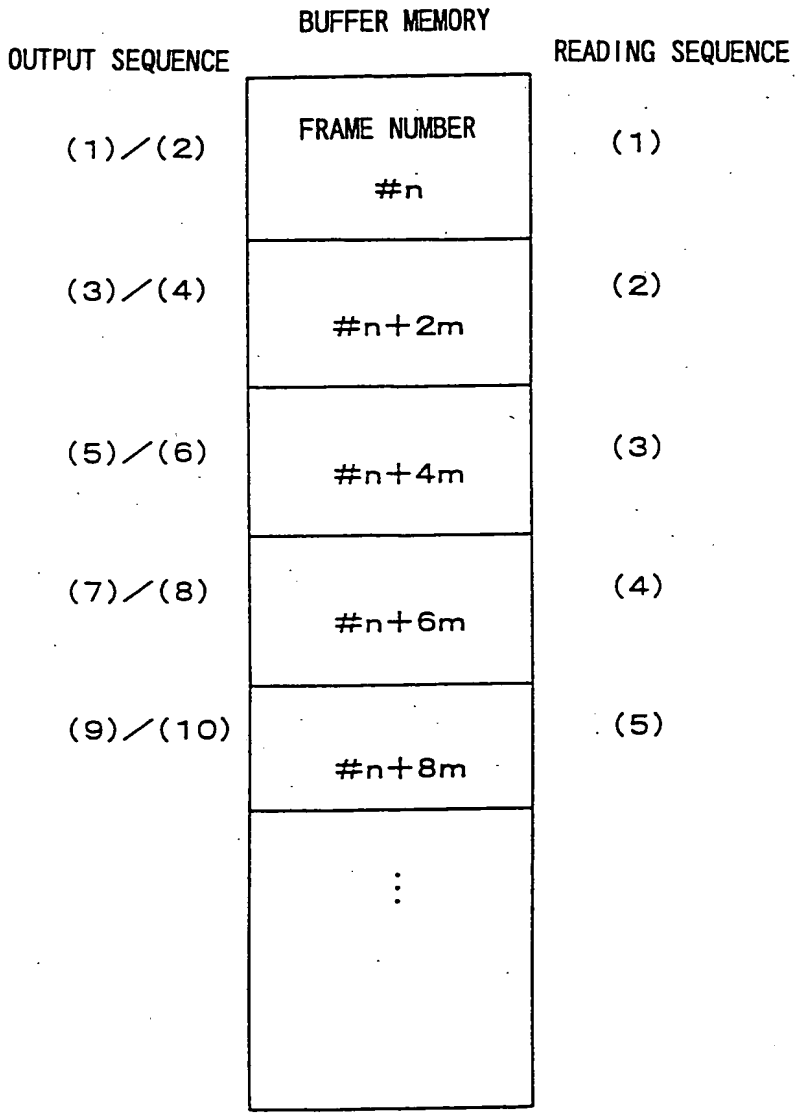


FIG. 40 REVERSE DIRECTION/NORMAL-SPEED PLAYBACK

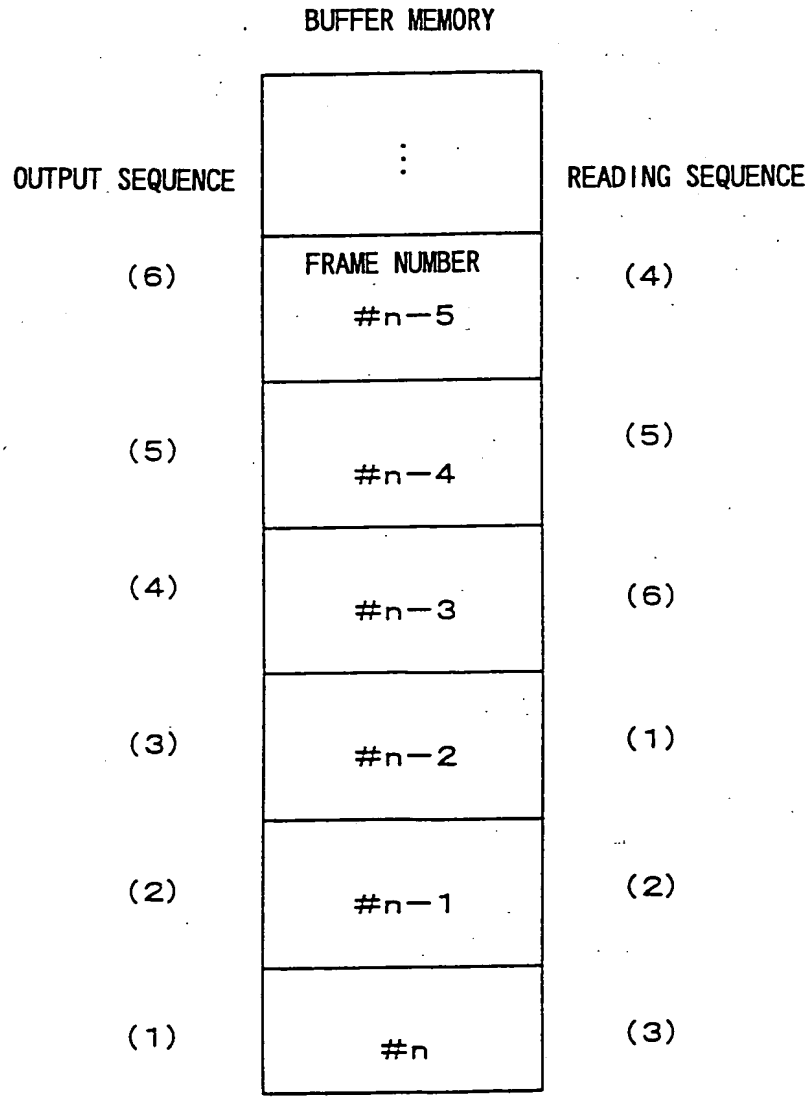
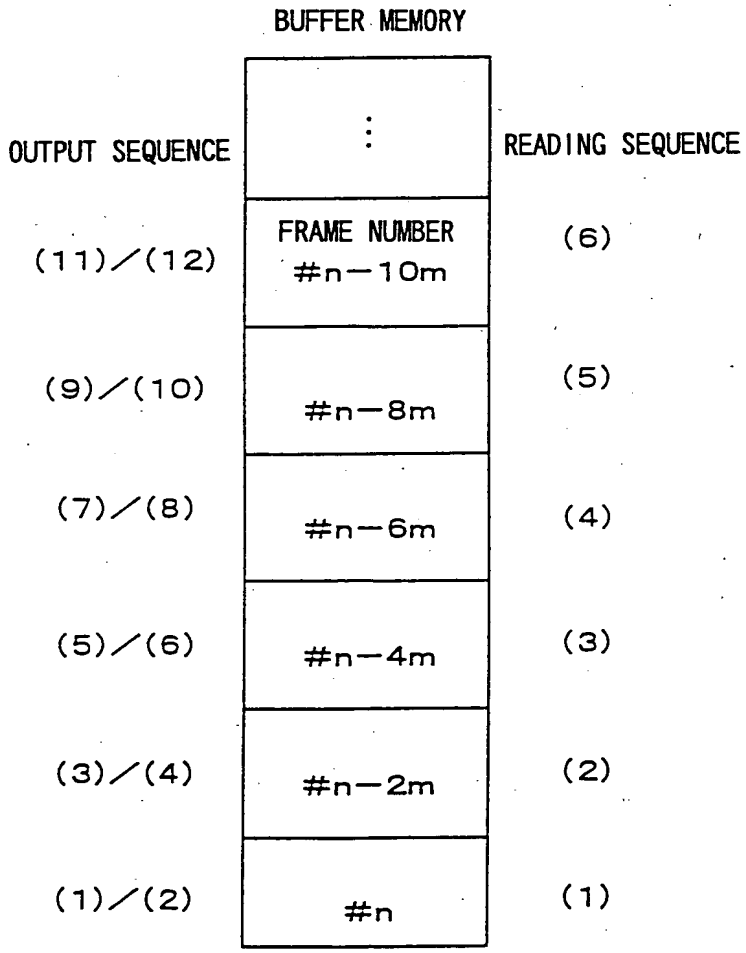


FIG. 41 REVERSE DIRECTION/HIGH-SPEED PLAYBACK



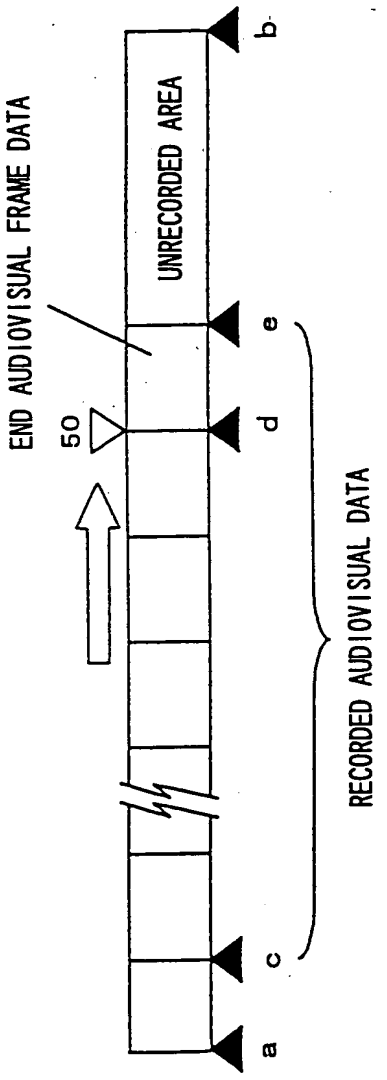

END AUDIOVISUAL FRAME DATA
50
UNRECORDED AREA
RECORDED AUDIOVISUAL DATA
a
b
c
d
e

FIG. 42

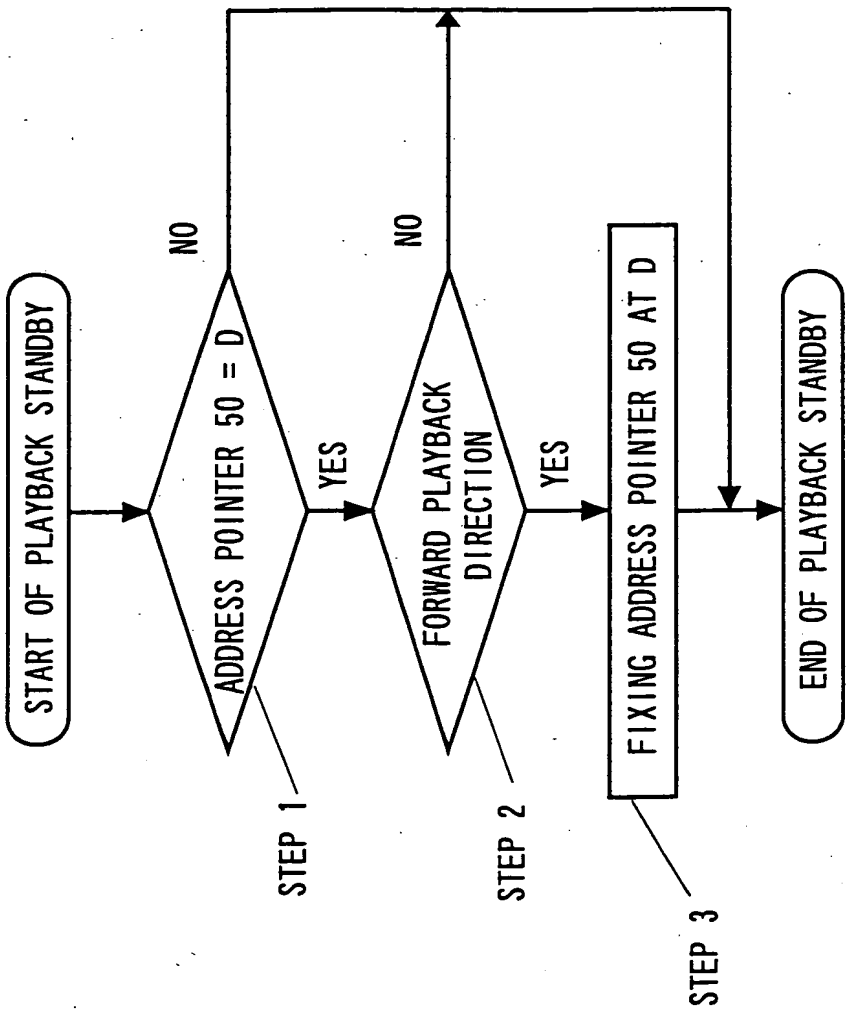

START OF PLAYBACK STANDBY
ADDRESS POINTER 50 = D
NO
YES
FORWARD PLAYBACK DIRECTION
NO
YES
FIXING ADDRESS POINTER 50 AT D
END OF PLAYBACK STANDBY
STEP 1
STEP 2
STEP 3

FIG. 43

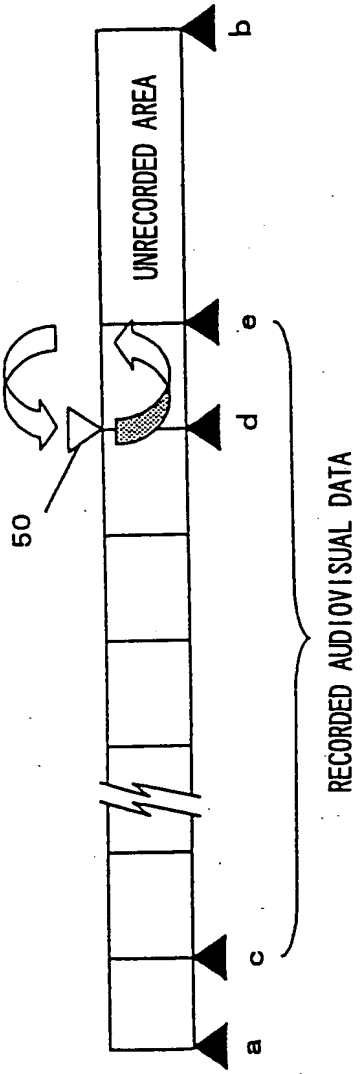


FIG. 44

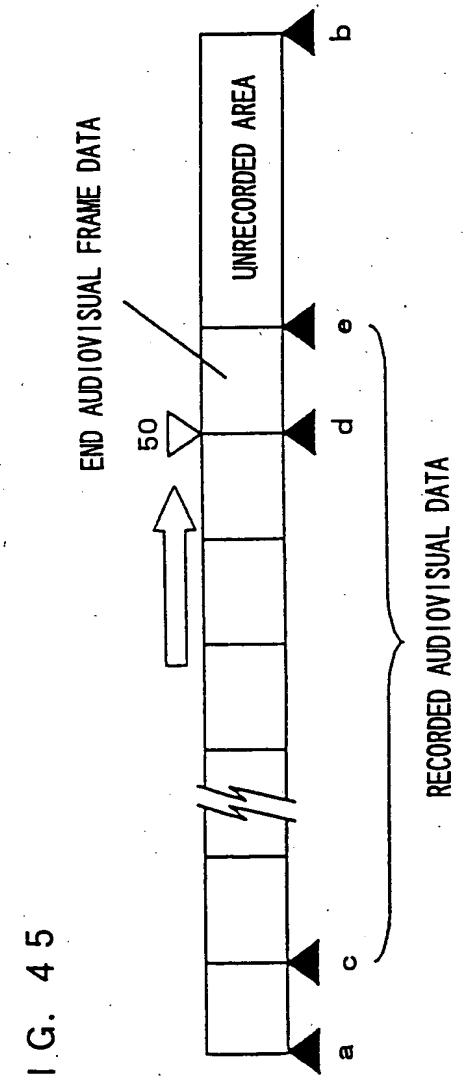

END AUDIOVISUAL FRAME DATA
50
UNRECORDED AREA
RECORDED AUDIOVISUAL DATA
a
b
c
d
e

FIG. 45

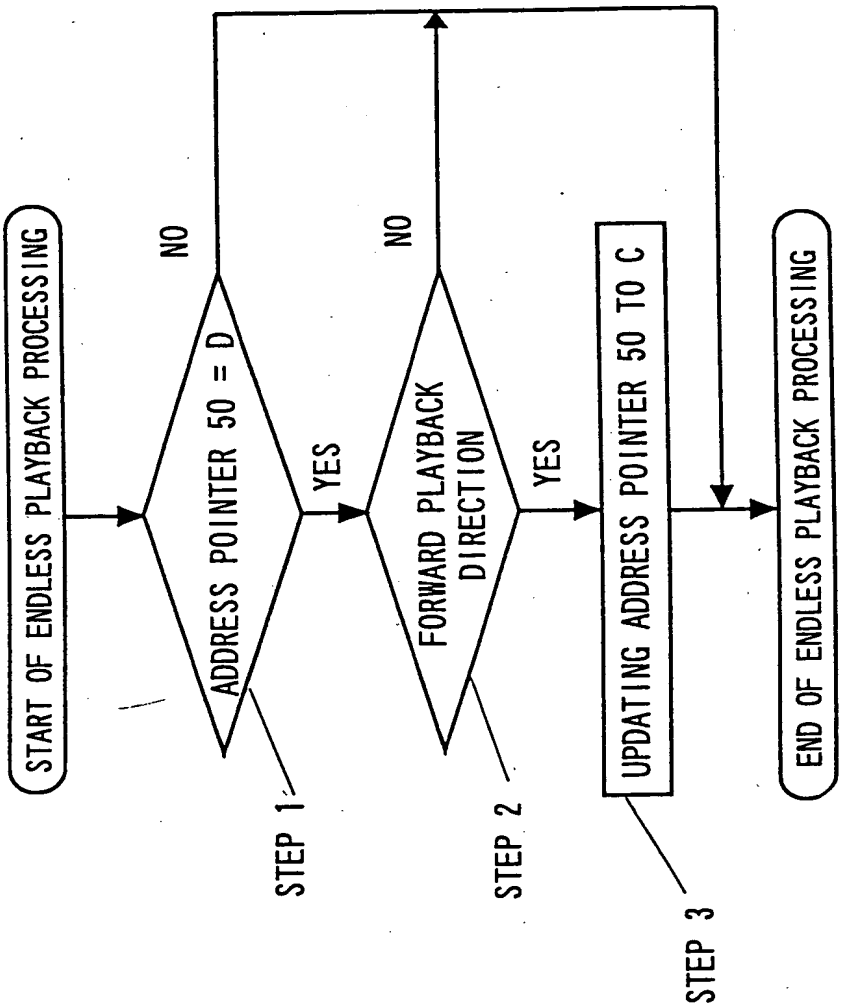
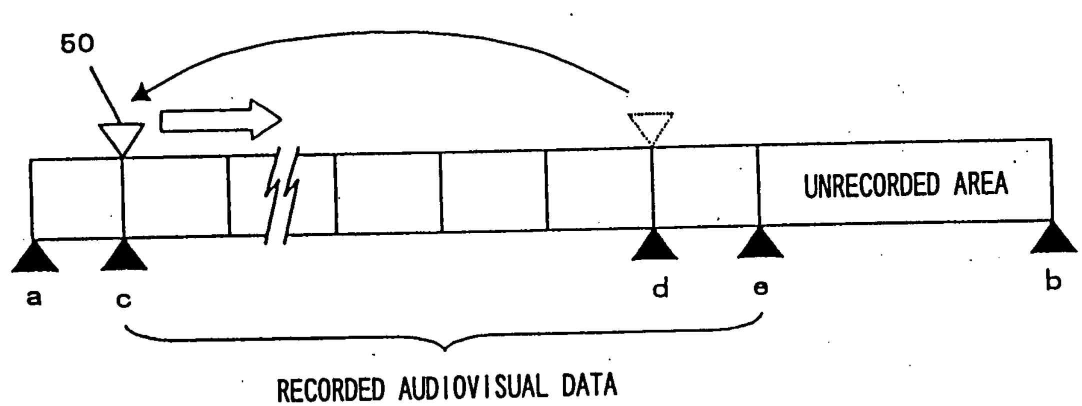

START OF ENDLESS PLAYBACK PROCESSING
ADDRESS POINTER 50 = D
NO
YES
STEP 1
FORWARD PLAYBACK DIRECTION
NO
YES
STEP 2
UPDATING ADDRESS POINTER 50 TO C
STEP 3
END OF ENDLESS PLAYBACK PROCESSING

FIG. 46

FIG. 47



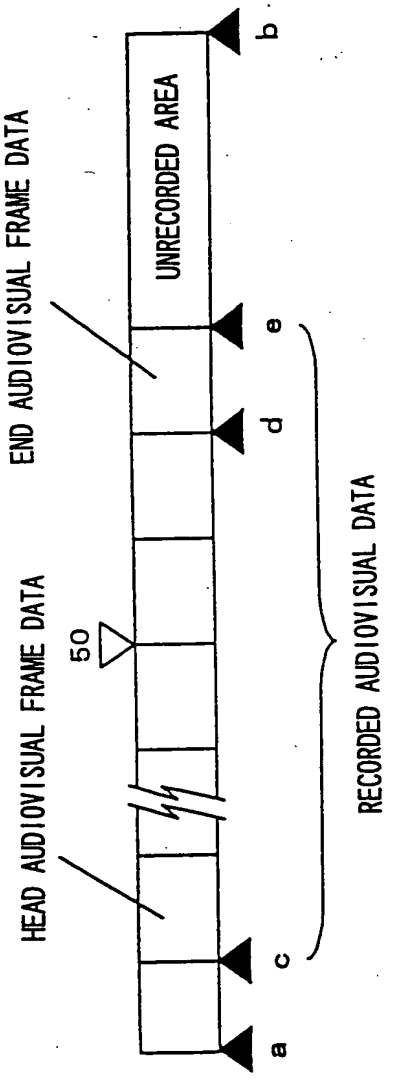
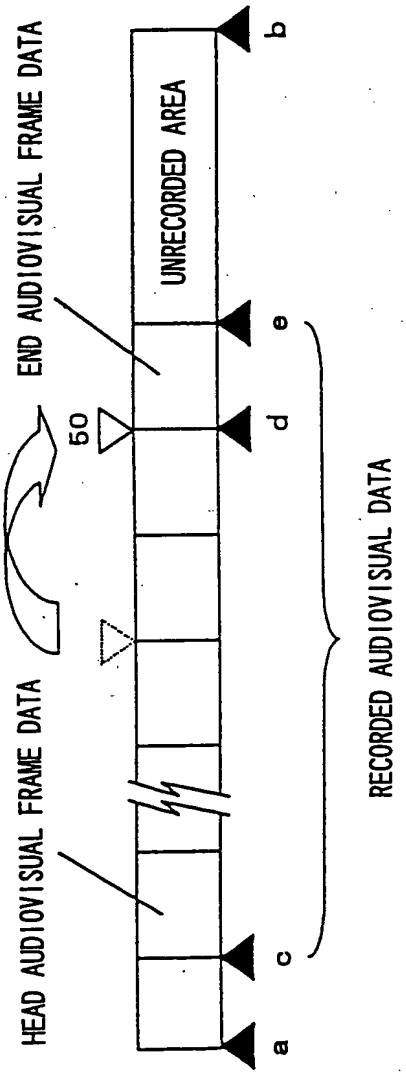

HEAD AUDIOVISUAL FRAME DATA
END AUDIOVISUAL FRAME DATA
UNRECORDED AREA
50
a
b
c
d
e
RECORDED AUDIOVISUAL DATA

FIG. 48

FIG. 49


HEAD AUDIOVISUAL FRAME DATA
END AUDIOVISUAL FRAME DATA
50
UNRECORDED AREA
a
c
d
e
b
RECORDED AUDIOVISUAL DATA

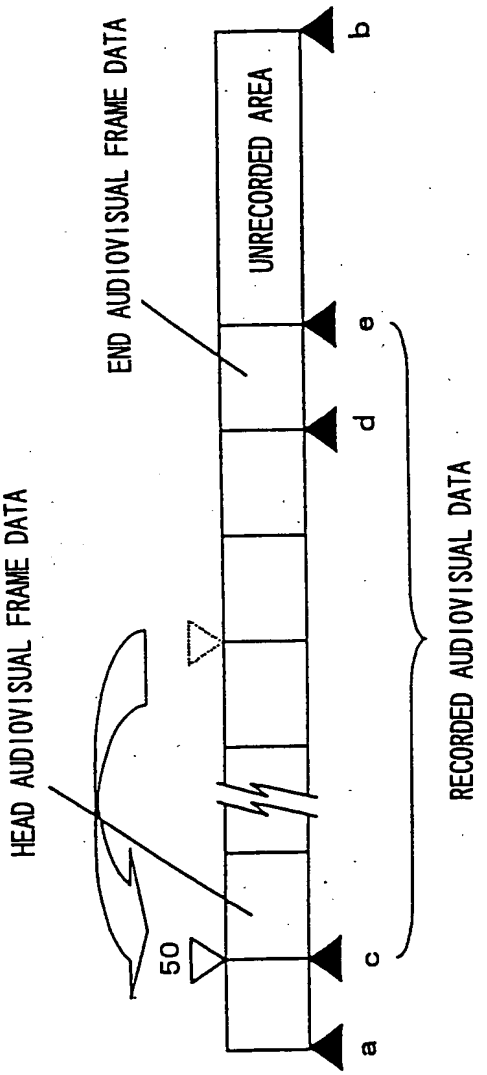


FIG. 50

FIG. 51

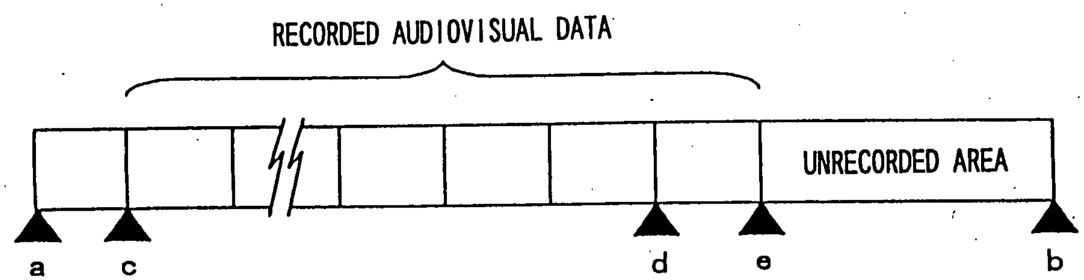
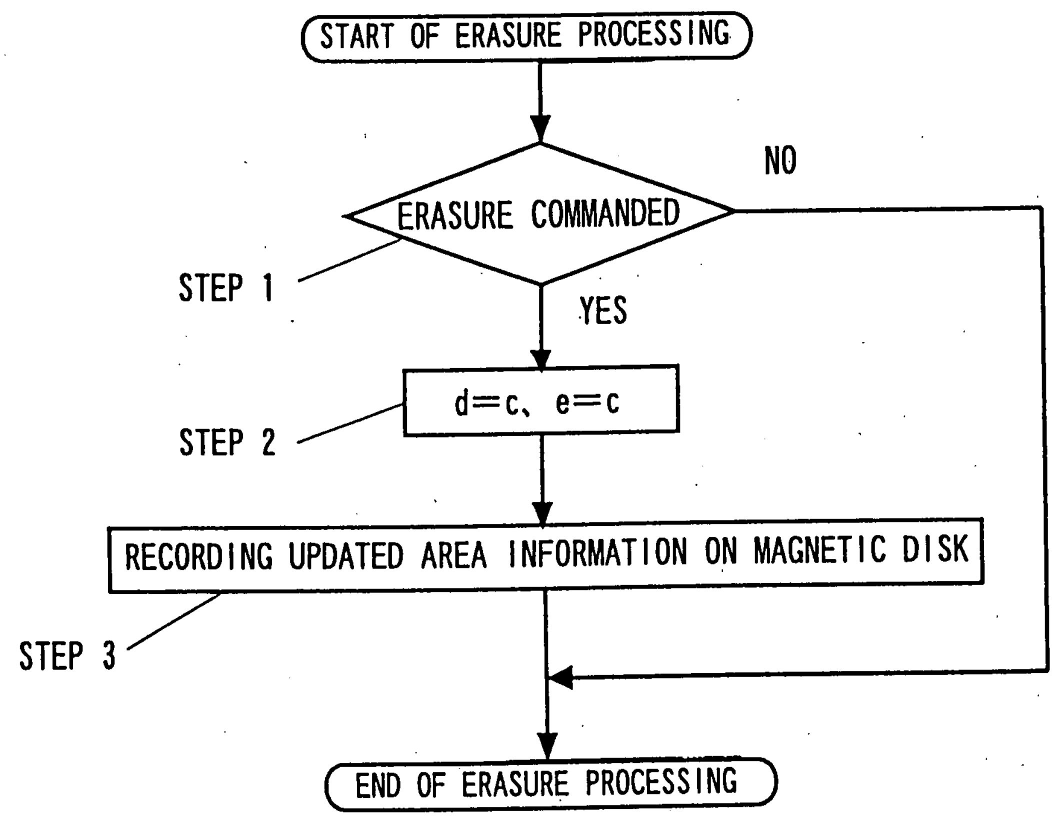


FIG. 52


START OF ERASURE PROCESSING
ERASURE COMMANDED
NO
YES
STEP 1
d=c、e=c
STEP 2
RECORDING UPDATED AREA INFORMATION ON MAGNETIC DISK
STEP 3
END OF ERASURE PROCESSING

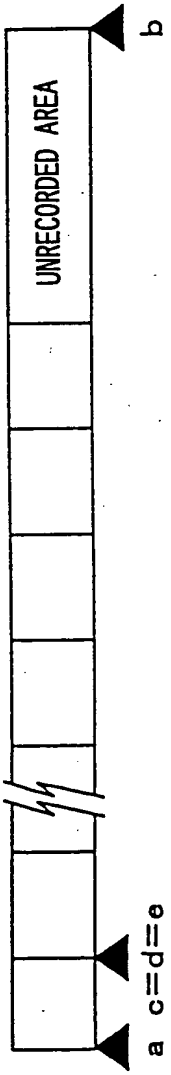
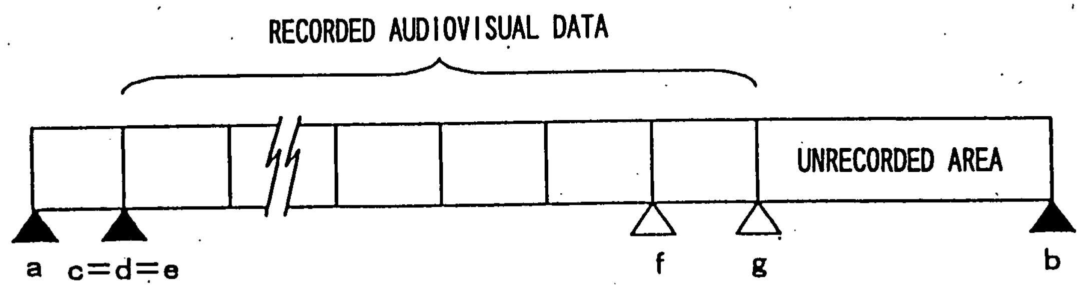


FIG. 53

F I G. 54



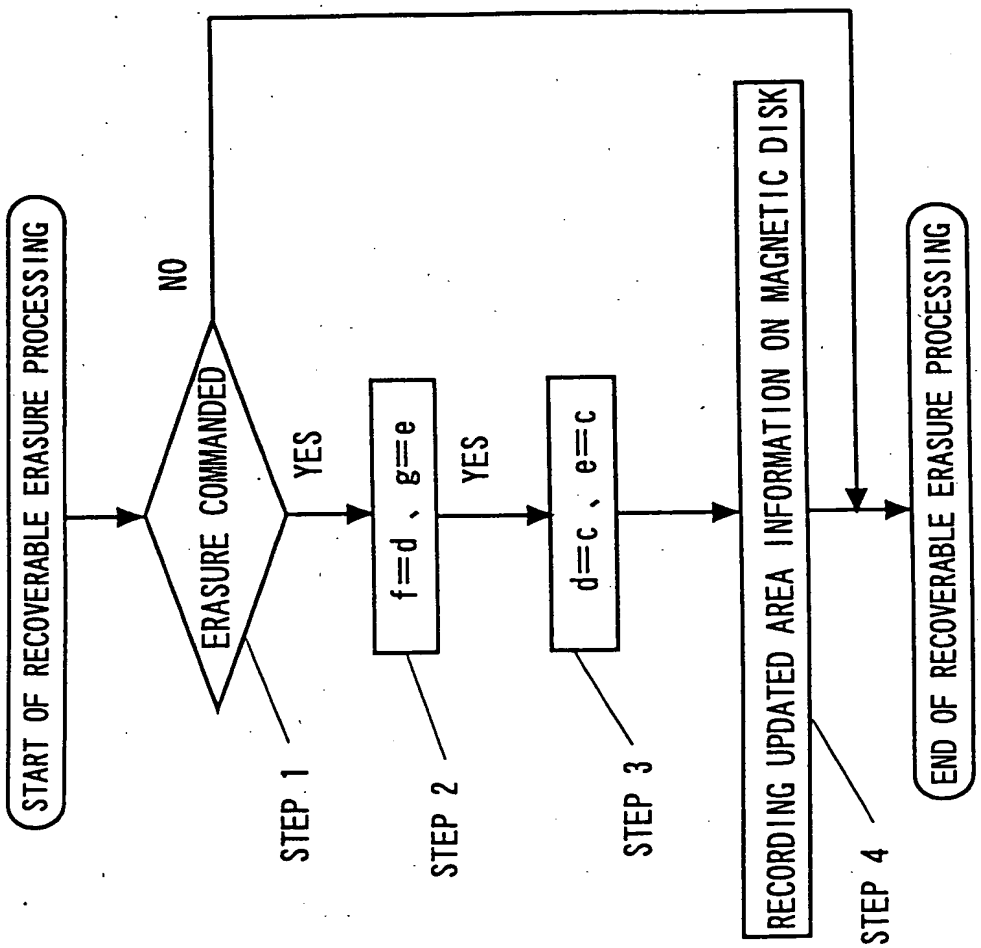

START OF RECOVERABLE ERASURE PROCESSING
ERASURE COMMANDED
NO
YES
STEP 1
f=d、g=e
YES
STEP 2
d=c、e=c
STEP 3
RECORDING UPDATED AREA INFORMATION ON MAGNETIC DISK
STEP 4
END OF RECOVERABLE ERASURE PROCESSING

FIG. 55

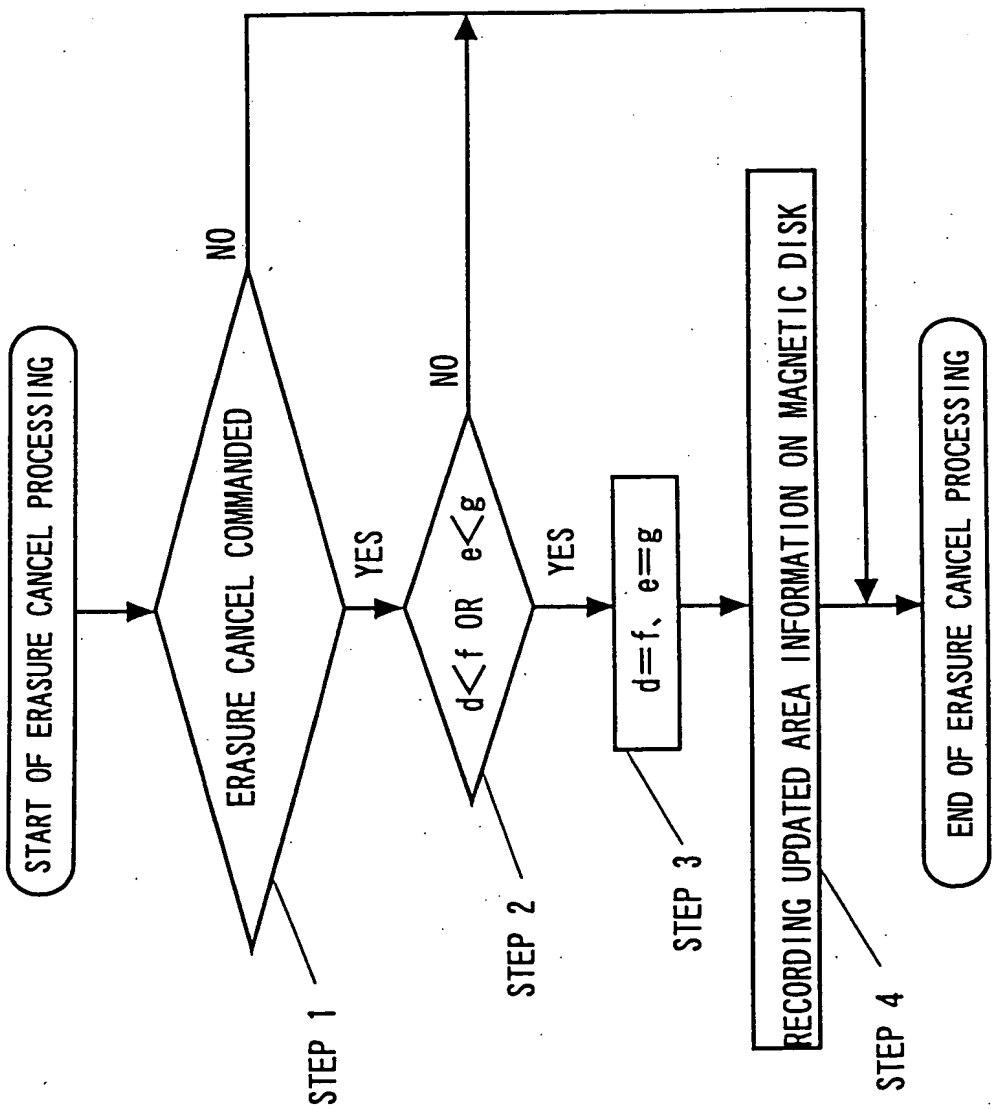

START OF ERASURE CANCEL PROCESSING
ERASURE CANCEL COMMANDED
NO
YES
STEP 1
d<f OR e<g
NO
YES
STEP 2
d=f, e=g
STEP 3
RECORDING UPDATED AREA INFORMATION ON MAGNETIC DISK
STEP 4
END OF ERASURE CANCEL PROCESSING

FIG. 56

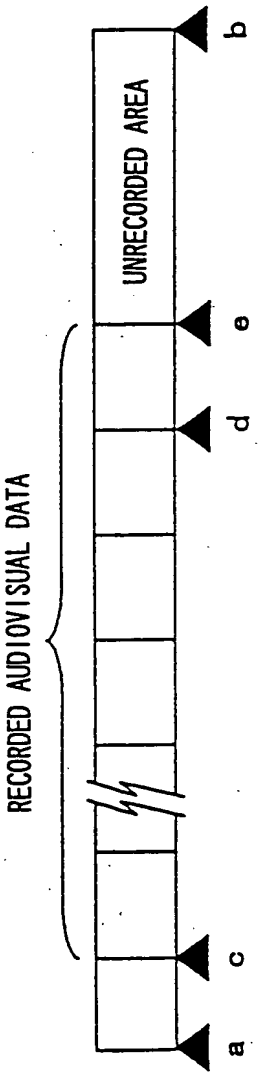
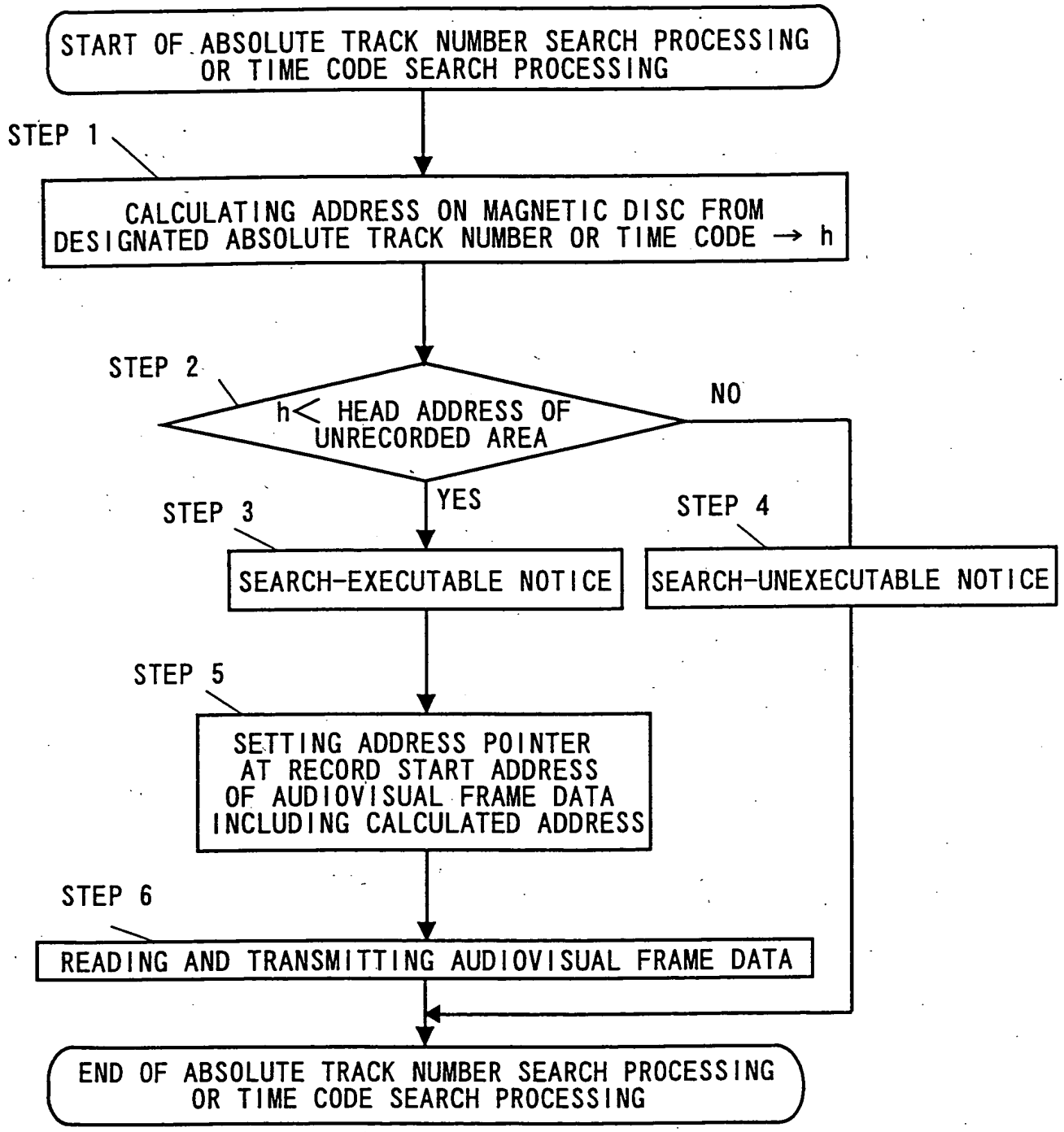


FIG. 57

FIG. 58


START OF ABSOLUTE TRACK NUMBER SEARCH PROCESSING OR TIME CODE SEARCH PROCESSING
STEP 1
CALCULATING ADDRESS ON MAGNETIC DISC FROM DESIGNATED ABSOLUTE TRACK NUMBER OR TIME CODE → h
STEP 2
h < HEAD ADDRESS OF UNRECORDED AREA
NO
YES
STEP 3
SEARCH-EXECUTABLE NOTICE
STEP 4
SEARCH-UNEXECUTABLE NOTICE
STEP 5
SETTING ADDRESS POINTER AT RECORD START ADDRESS OF AUDIOVISUAL FRAME DATA INCLUDING CALCULATED ADDRESS
STEP 6
READING AND TRANSMITTING AUDIOVISUAL FRAME DATA
END OF ABSOLUTE TRACK NUMBER SEARCH PROCESSING OR TIME CODE SEARCH PROCESSING

F I G. 5 9

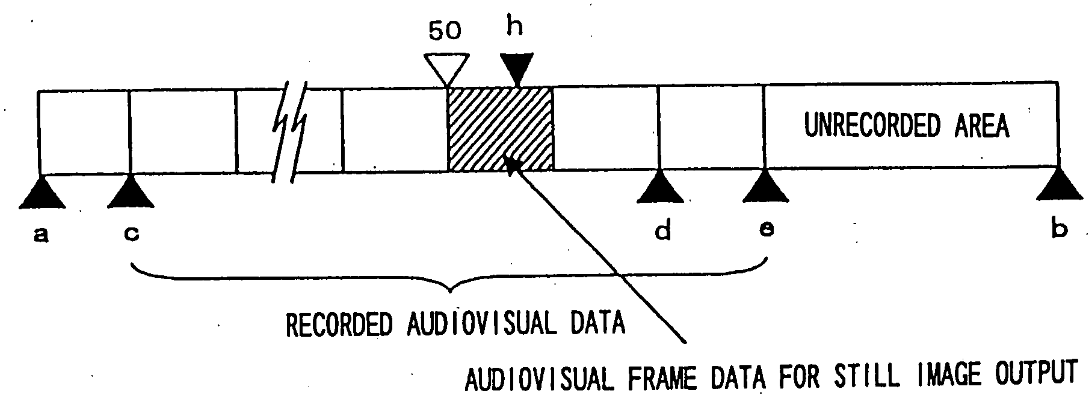


FIG. 60

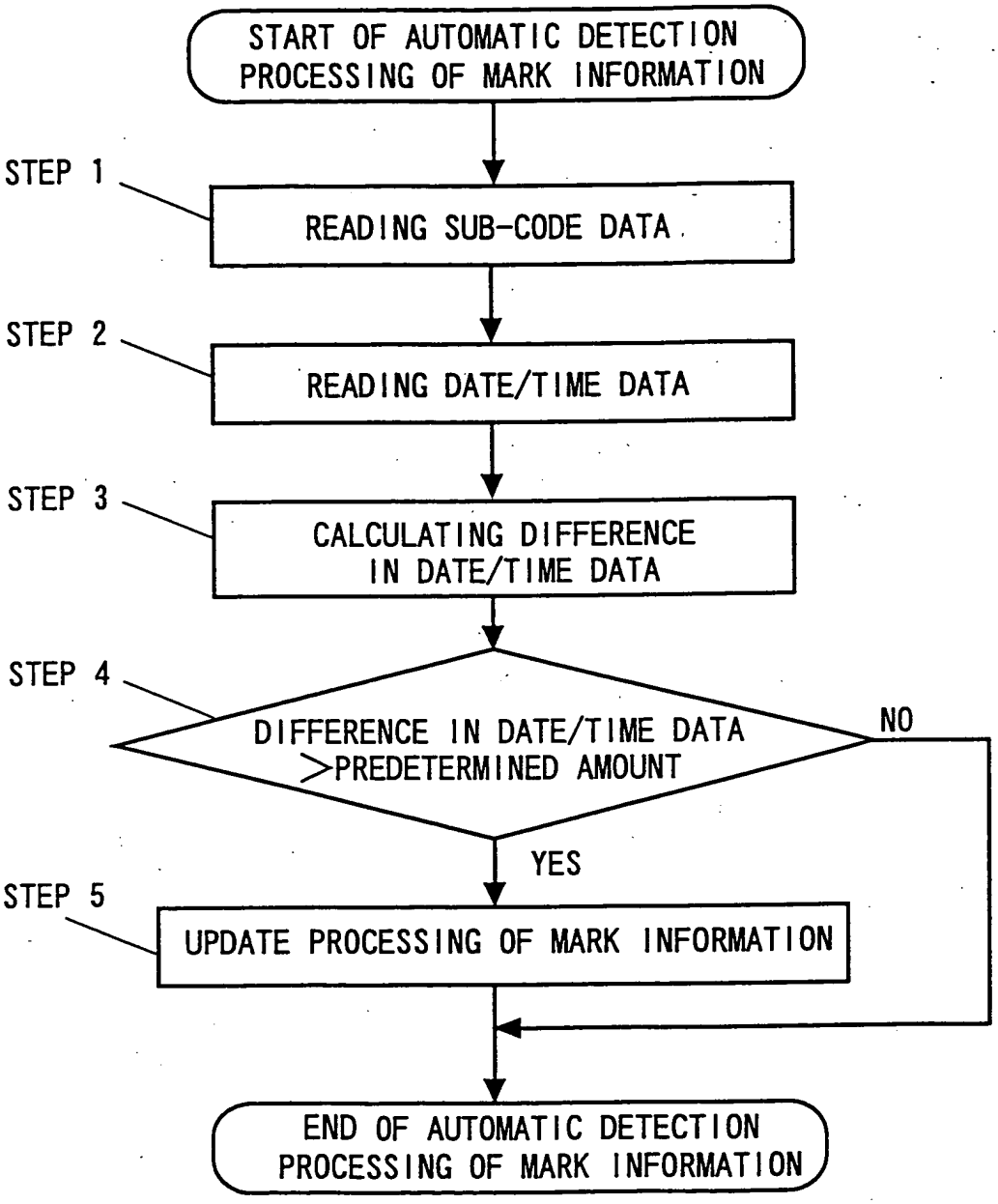

START OF AUTOMATIC DETECTION PROCESSING OF MARK INFORMATION
STEP 1
READING SUB-CODE DATA
STEP 2
READING DATE/TIME DATA
STEP 3
CALCULATING DIFFERENCE IN DATE/TIME DATA
STEP 4
DIFFERENCE IN DATE/TIME DATA >PREDETERMINED AMOUNT
NO
YES
STEP 5
UPDATE PROCESSING OF MARK INFORMATION
END OF AUTOMATIC DETECTION PROCESSING OF MARK INFORMATION

FIG. 61

RECORD START ADDRESS	TIME CODE	ABSOLUTE TRACK NUMBER
AD1	TC1	ATN1
AD2	TC2	ATN2
AD3	TC3	ATN3
⋮	⋮	⋮

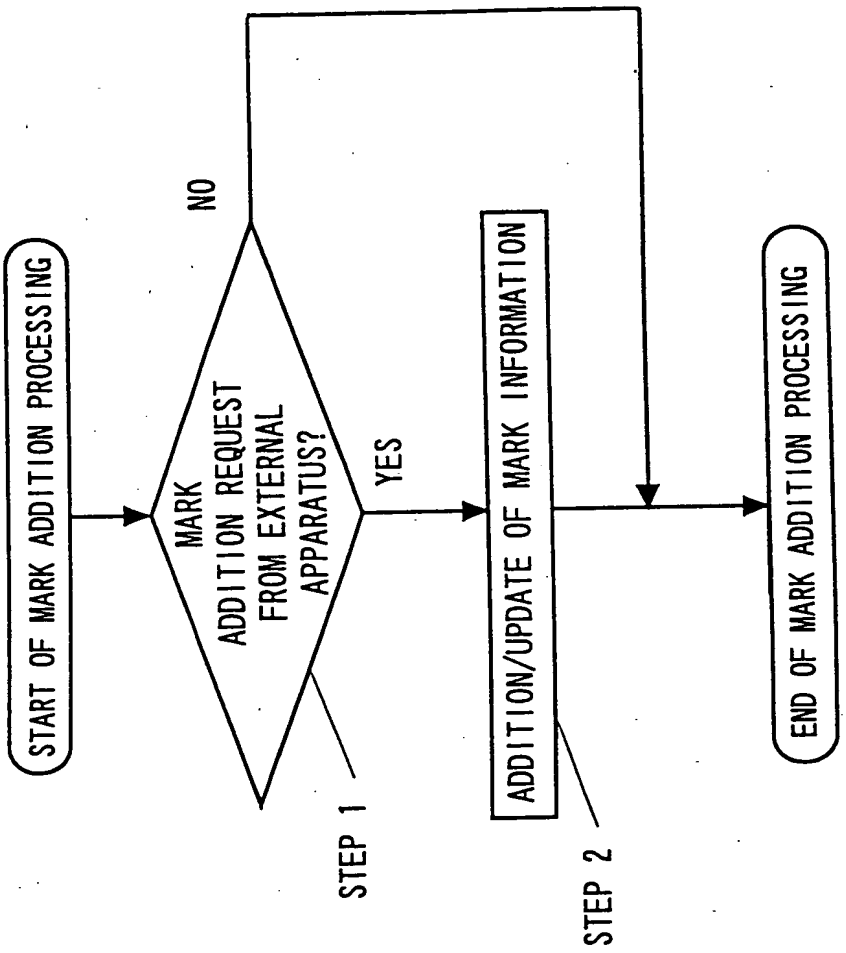

START OF MARK ADDITION PROCESSING
MARK ADDITION REQUEST FROM EXTERNAL APPARATUS?
NO
YES
STEP 1
ADDITION/UPDATE OF MARK INFORMATION
STEP 2
END OF MARK ADDITION PROCESSING

FIG. 62

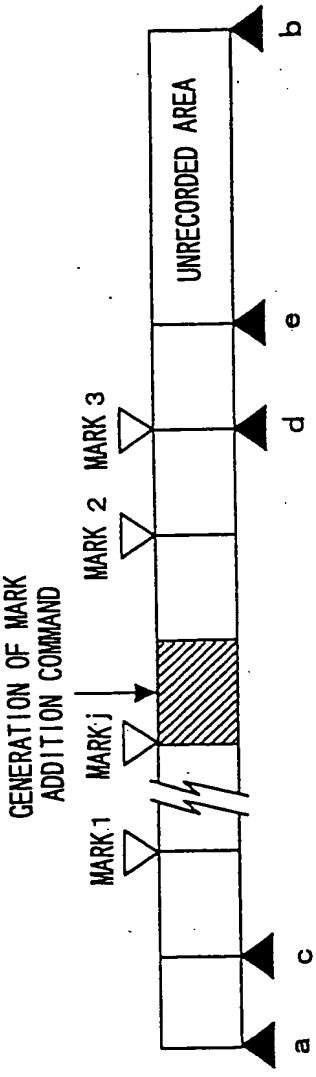
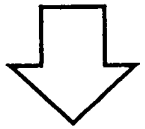

GENERATION OF MARK
ADDITION COMMAND
MARK 1
MARK j
MARK 2
MARK 3
UNRECORDED AREA
a
c
d
e
b

FIG. 63

FIG. 64

RECORD START ADDRESS	TIME CODE	ABSOLUTE TRACK NUMBER	
AD1	TC1	ATN1	← MARK INFORMATION AT MARK 1
AD2	TC2	ATN2	← MARK INFORMATION AT MARK 2
AD3	TC3	ATN3	← MARK INFORMATION AT MARK 3



RECORD START ADDRESS	TIME CODE	ABSOLUTE TRACK NUMBER	
AD1	TC1	ATN1	← MARK INFORMATION AT MARK 1
ADj	TCj	ATNj	← MARK INFORMATION AT MARK j
AD2	TC2	ATN2	← MARK INFORMATION AT MARK 2
AD3	TC3	ATN3	← MARK INFORMATION AT MARK 3

FIG. 65

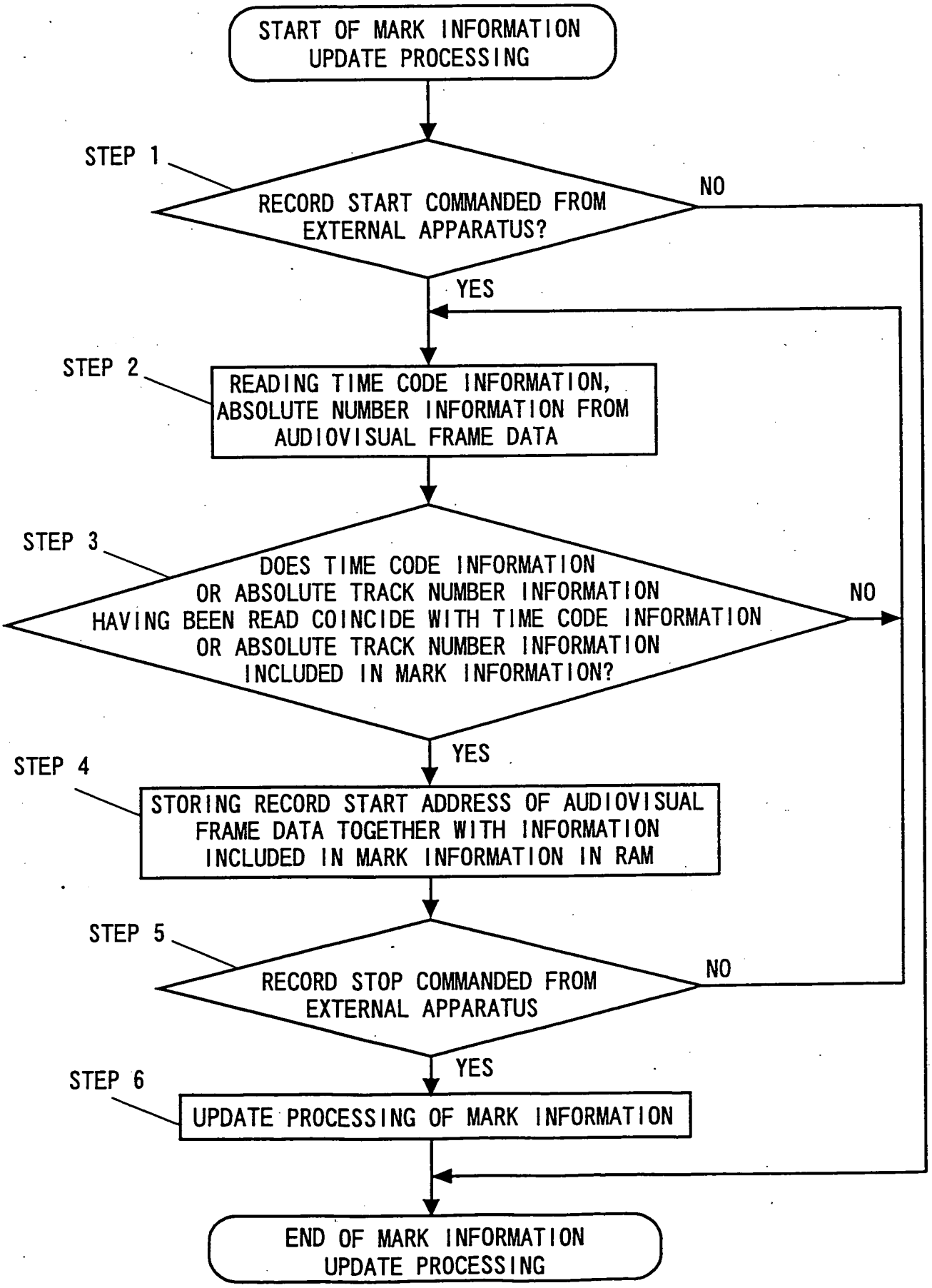

START OF MARK INFORMATION UPDATE PROCESSING
STEP 1
RECORD START COMMANDED FROM EXTERNAL APPARATUS?
NO
YES
STEP 2
READING TIME CODE INFORMATION, ABSOLUTE NUMBER INFORMATION FROM AUDIOVISUAL FRAME DATA
STEP 3
DOES TIME CODE INFORMATION OR ABSOLUTE TRACK NUMBER INFORMATION HAVING BEEN READ COINCIDE WITH TIME CODE INFORMATION OR ABSOLUTE TRACK NUMBER INFORMATION INCLUDED IN MARK INFORMATION?
NO
YES
STEP 4
STORING RECORD START ADDRESS OF AUDIOVISUAL FRAME DATA TOGETHER WITH INFORMATION INCLUDED IN MARK INFORMATION IN RAM
STEP 5
RECORD STOP COMMANDED FROM EXTERNAL APPARATUS
NO
YES
STEP 6
UPDATE PROCESSING OF MARK INFORMATION
END OF MARK INFORMATION UPDATE PROCESSING

FIG. 66

MARK INFORMATION STORED IN MAGNETIC DISK APPARATUS

RECORD START ADDRESS	TIME CODE	ABSOLUTE TRACK NUMBER
AD1	TC1	ATN1
AD4	TC4	ATN4
AD6	TC6	ATN6

EXTERNALLY RECEIVED MARK INFORMATION AND RECORD START ADDRESS

RECORD START ADDRESS	TIME CODE	ABSOLUTE TRACK NUMBER
AD2	TC2	ATN2
AD3	TC3	ATN3
AD5	TC5	ATN5

UPDATED MARK INFORMATION IN MAGNETIC DISK APPARATUS

RECORD START ADDRESS	TIME CODE	ABSOLUTE TRACK NUMBER
AD1	TC1	ATN1
AD2	TC2	ATN2
AD3	TC3	ATN3
AD5	TC5	ATN5
AD6	TC6	ATN6

FIG. 67

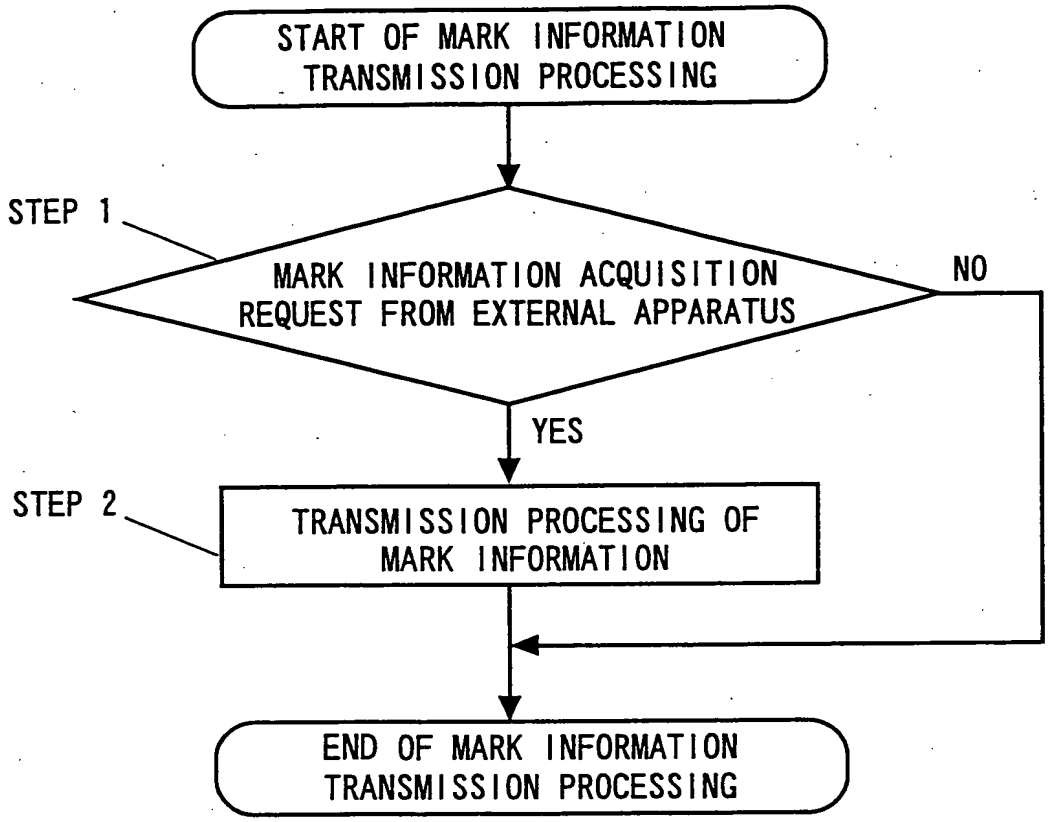

START OF MARK INFORMATION TRANSMISSION PROCESSING
STEP 1
MARK INFORMATION ACQUISITION REQUEST FROM EXTERNAL APPARATUS
NO
YES
STEP 2
TRANSMISSION PROCESSING OF MARK INFORMATION
END OF MARK INFORMATION TRANSMISSION PROCESSING

FIG. 68

TRANSMISSION FORMAT OF MARK INFORMATION

N (MARK INFORMATION AMOUNT)
ATN1 (ABSOLUTE TRACK NUMBER)
ATN2 (ABSOLUTE TRACK NUMBER)
ATN3 (ABSOLUTE TRACK NUMBER)
ATN4 (ABSOLUTE TRACK NUMBER)
ATN5 (ABSOLUTE TRACK NUMBER)
⋮
ATNN (ABSOLUTE TRACK NUMBER)

FIG. 69

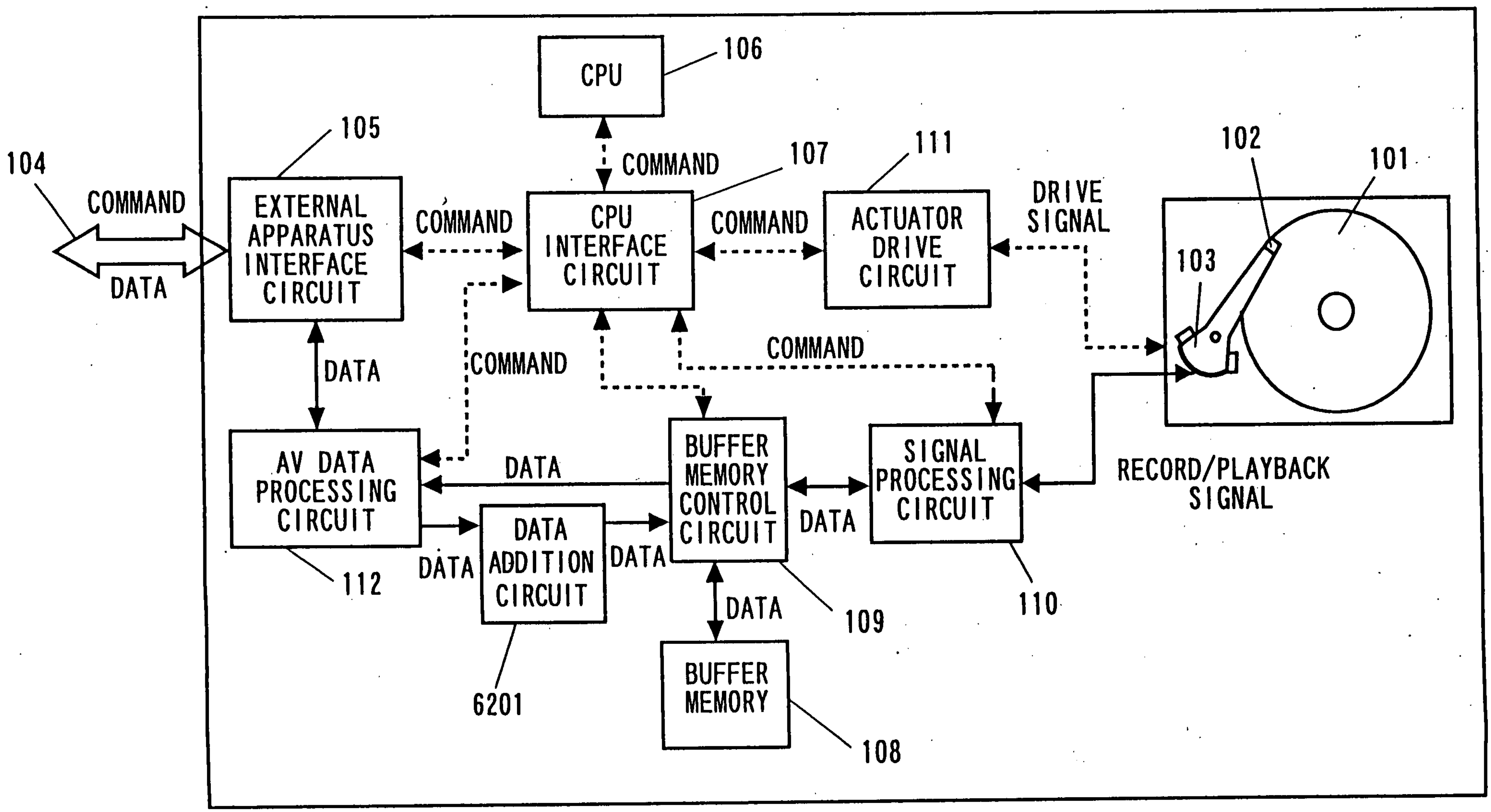

104
COMMAND
DATA
105
EXTERNAL APPARATUS INTERFACE CIRCUIT
COMMAND
CPU
106
COMMAND
107
CPU INTERFACE CIRCUIT
COMMAND
111
ACTUATOR DRIVE CIRCUIT
DRIVE SIGNAL
102
101
103
DATA
COMMAND
COMMAND
AV DATA PROCESSING CIRCUIT
DATA
BUFFER MEMORY CONTROL CIRCUIT
DATA
SIGNAL PROCESSING CIRCUIT
RECORD/PLAYBACK SIGNAL
112
DATA
DATA ADDITION CIRCUIT
DATA
109
110
DATA
6201
BUFFER MEMORY
108

FIG. 70

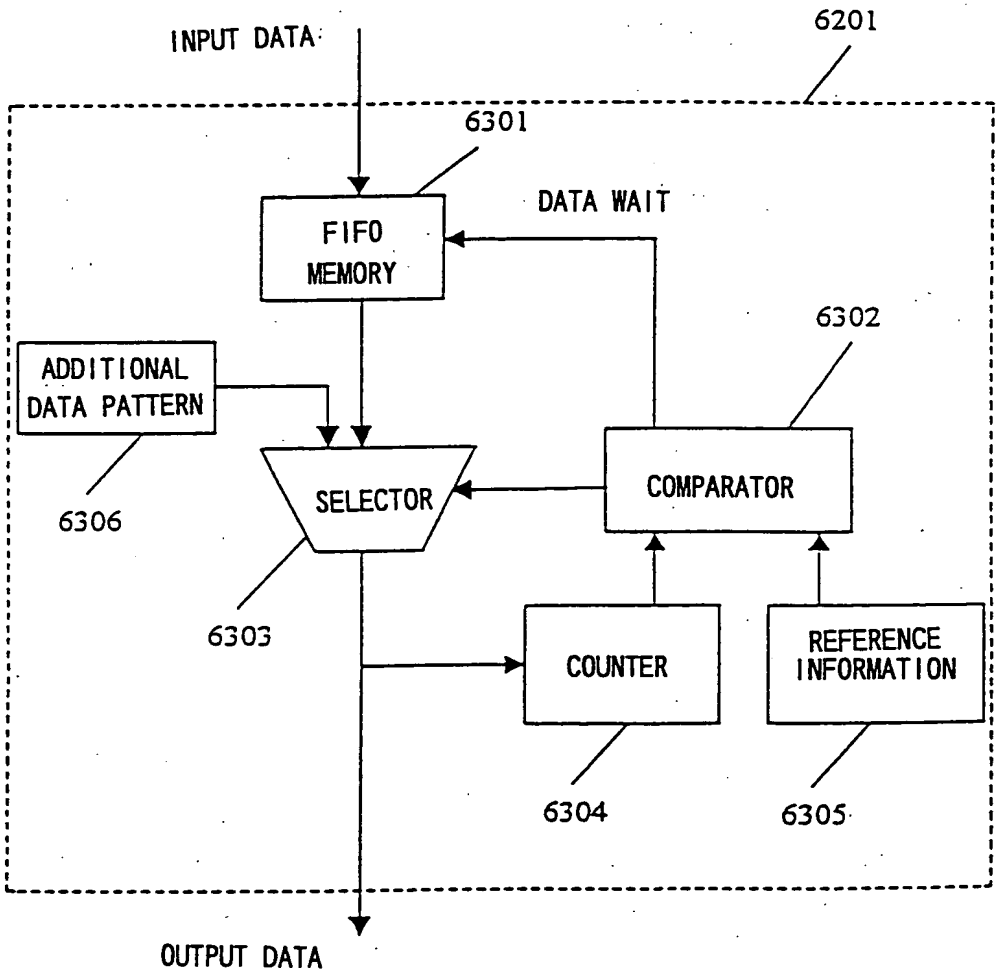

INPUT DATA
6201
6301
FIFO MEMORY
DATA WAIT
6302
ADDITIONAL DATA PATTERN
6306
SELECTOR
COMPARATOR
6303
COUNTER
REFERENCE INFORMATION
6304
6305
OUTPUT DATA

FIG. 71

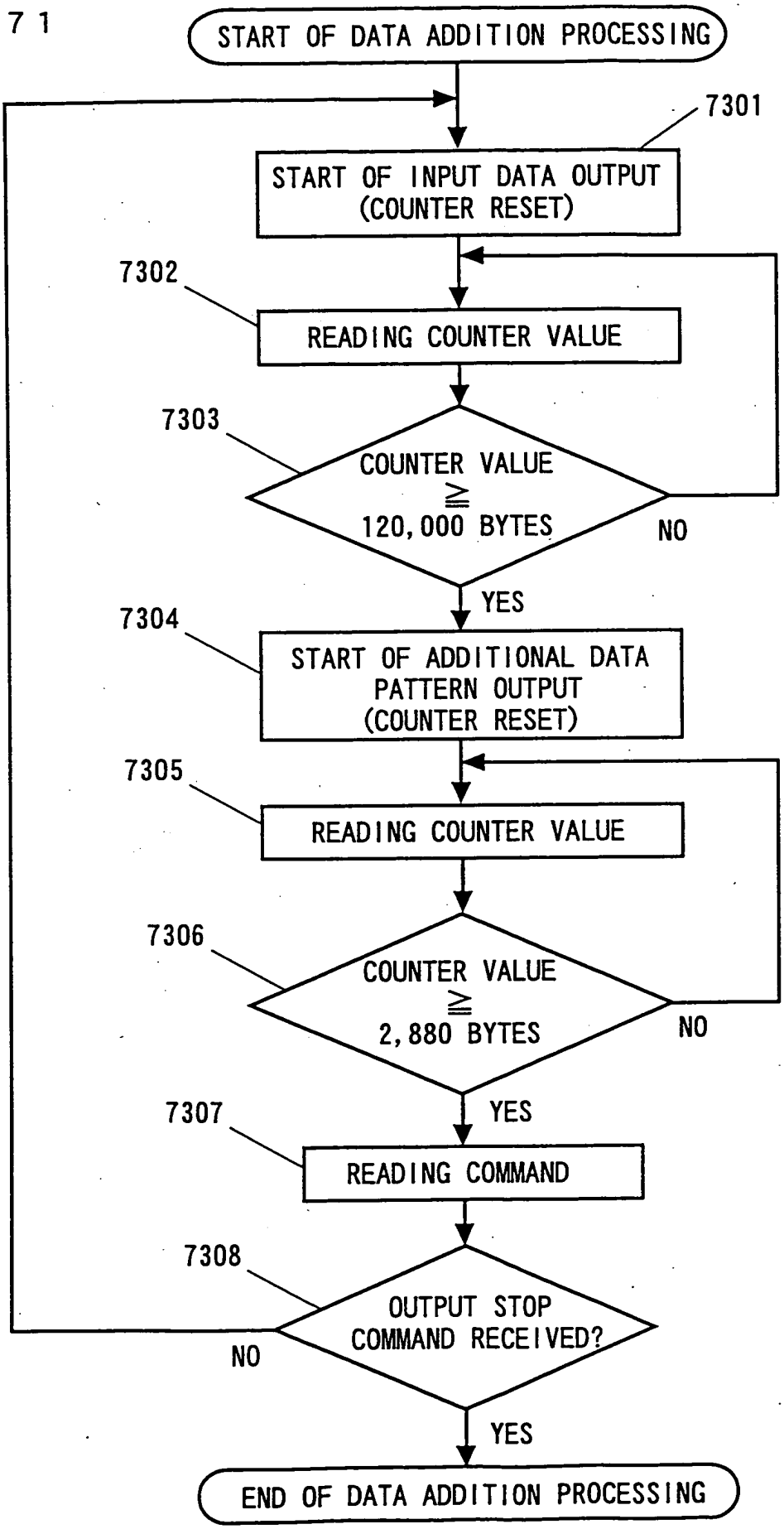

START OF DATA ADDITION PROCESSING
7301
START OF INPUT DATA OUTPUT (COUNTER RESET)
7302
READING COUNTER VALUE
7303
COUNTER VALUE ≧ 120,000 BYTES
NO
YES
7304
START OF ADDITIONAL DATA PATTERN OUTPUT (COUNTER RESET)
7305
READING COUNTER VALUE
7306
COUNTER VALUE ≧ 2,880 BYTES
NO
YES
7307
READING COMMAND
7308
OUTPUT STOP COMMAND RECEIVED?
NO
YES
END OF DATA ADDITION PROCESSING

FIG. 72

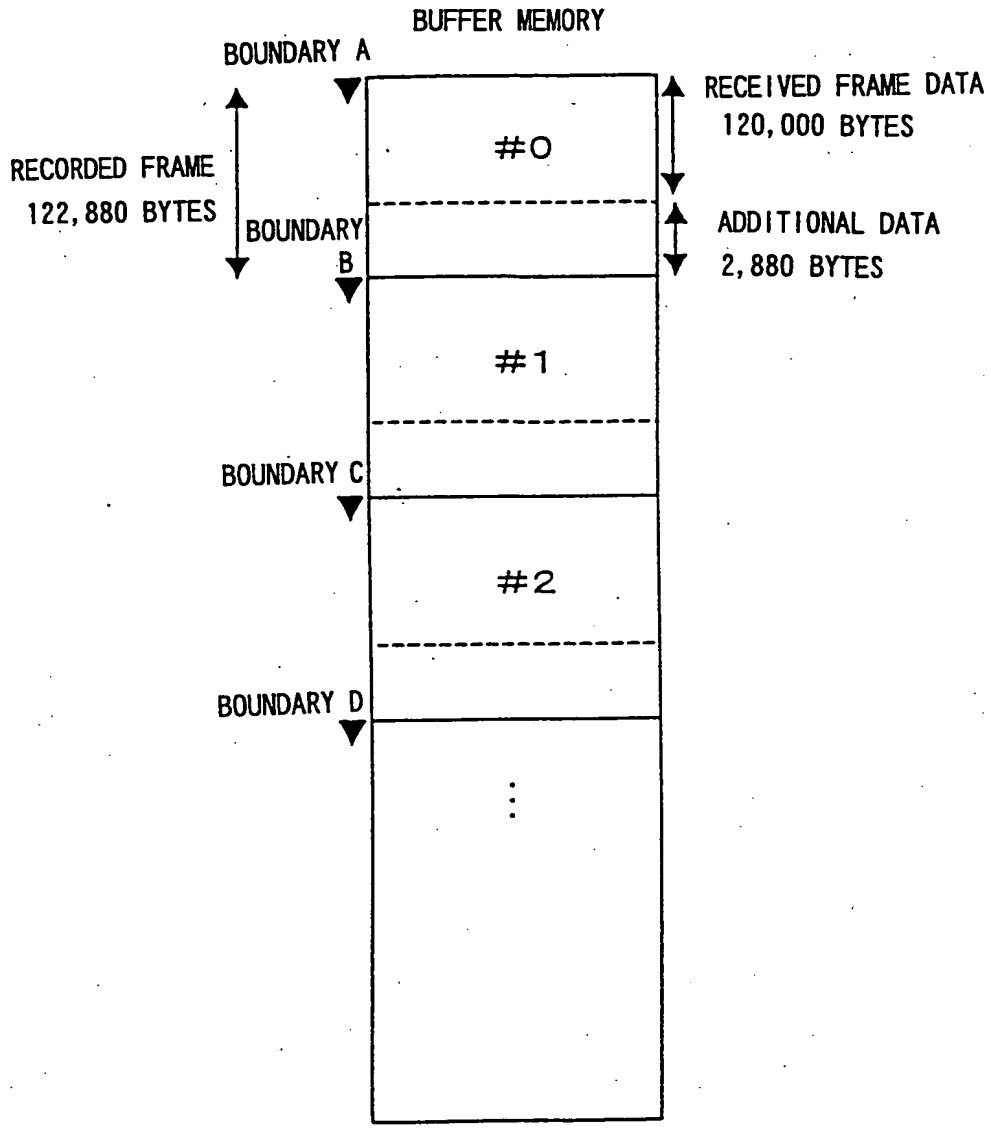

BUFFER MEMORY
BOUNDARY A
RECORDED FRAME
122,880 BYTES
#0
RECEIVED FRAME DATA
120,000 BYTES
BOUNDARY B
ADDITIONAL DATA
2,880 BYTES
#1
BOUNDARY C
#2
BOUNDARY D

FIG. 73

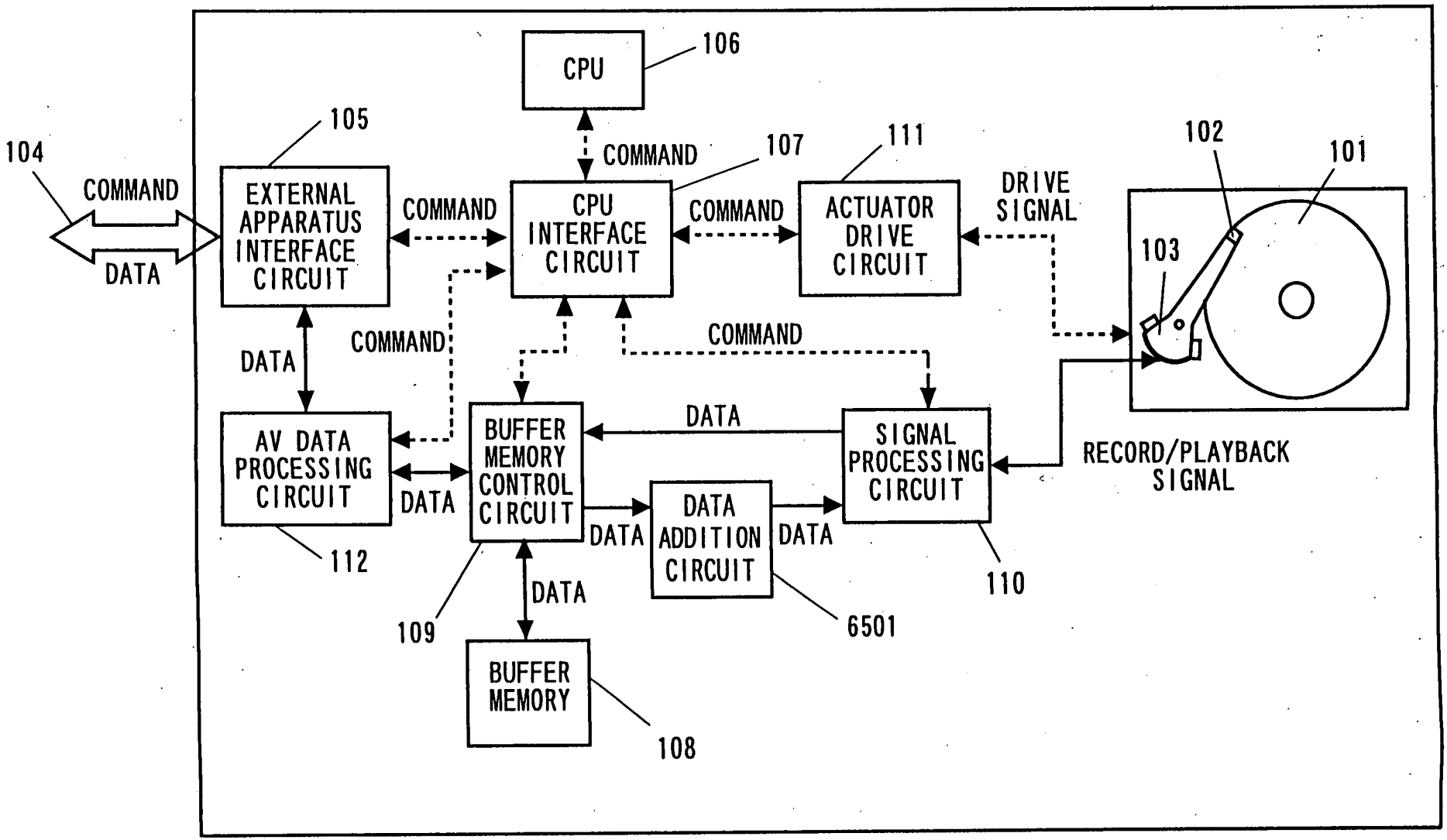
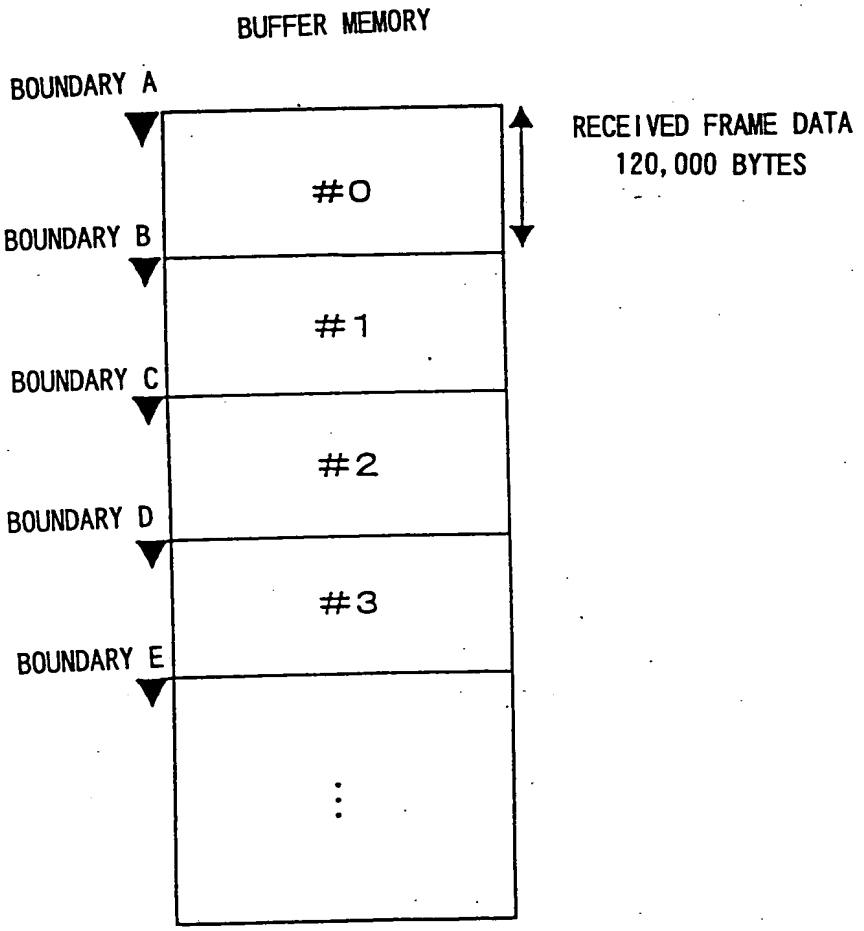


FIG. 74


BUFFER MEMORY
BOUNDARY A
BOUNDARY B
BOUNDARY C
BOUNDARY D
BOUNDARY E
#0
#1
#2
#3
RECEIVED FRAME DATA
120,000 BYTES

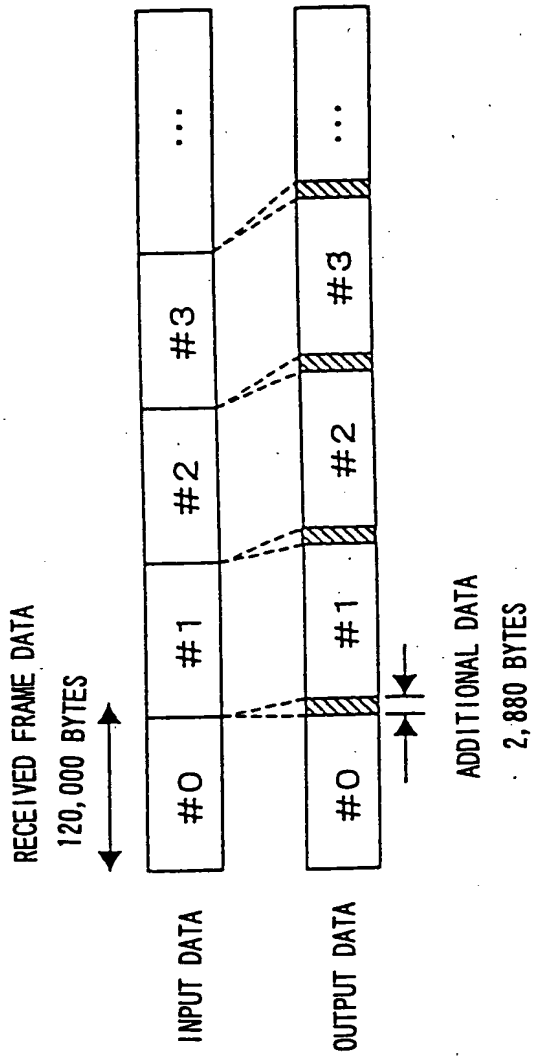

RECEIVED FRAME DATA
120,000 BYTES
#0
#1
#2
#3
...
INPUT DATA
OUTPUT DATA
ADDITIONAL DATA
2,880 BYTES

FIG. 75

FIG. 76

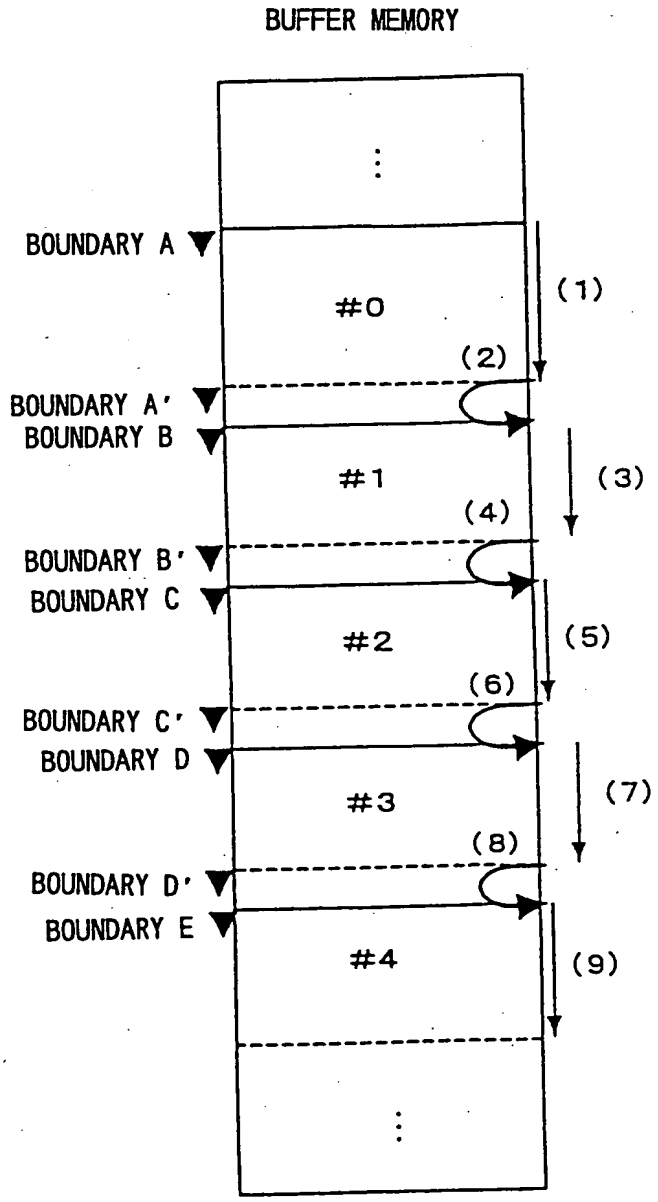

BUFFER MEMORY
BOUNDARY A
#0
(1)
(2)
BOUNDARY A'
BOUNDARY B
#1
(3)
(4)
BOUNDARY B'
BOUNDARY C
#2
(5)
(6)
BOUNDARY C'
BOUNDARY D
#3
(7)
(8)
BOUNDARY D'
BOUNDARY E
#4
(9)

FIG. 77

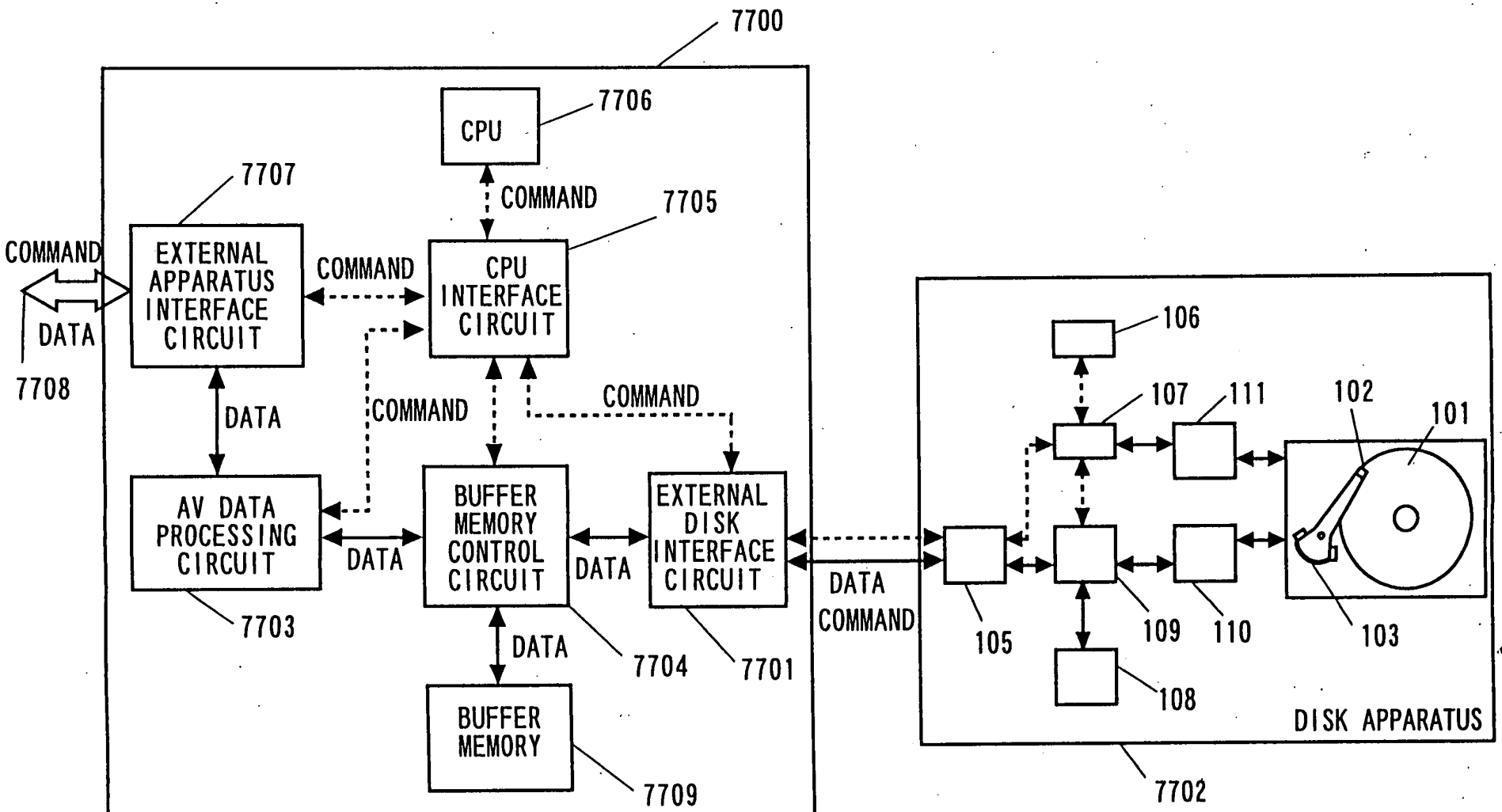


FIG. 78

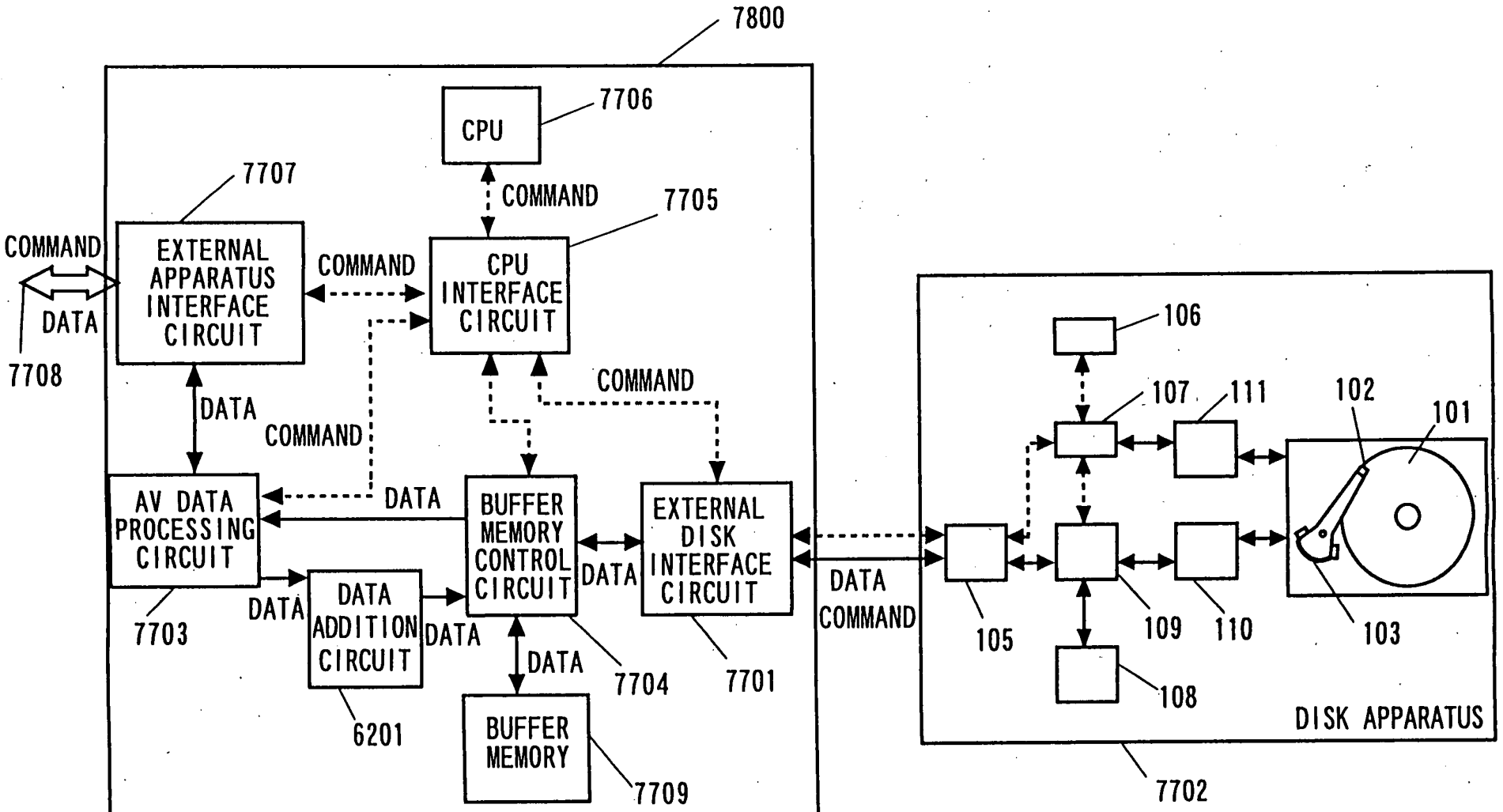


FIG. 79

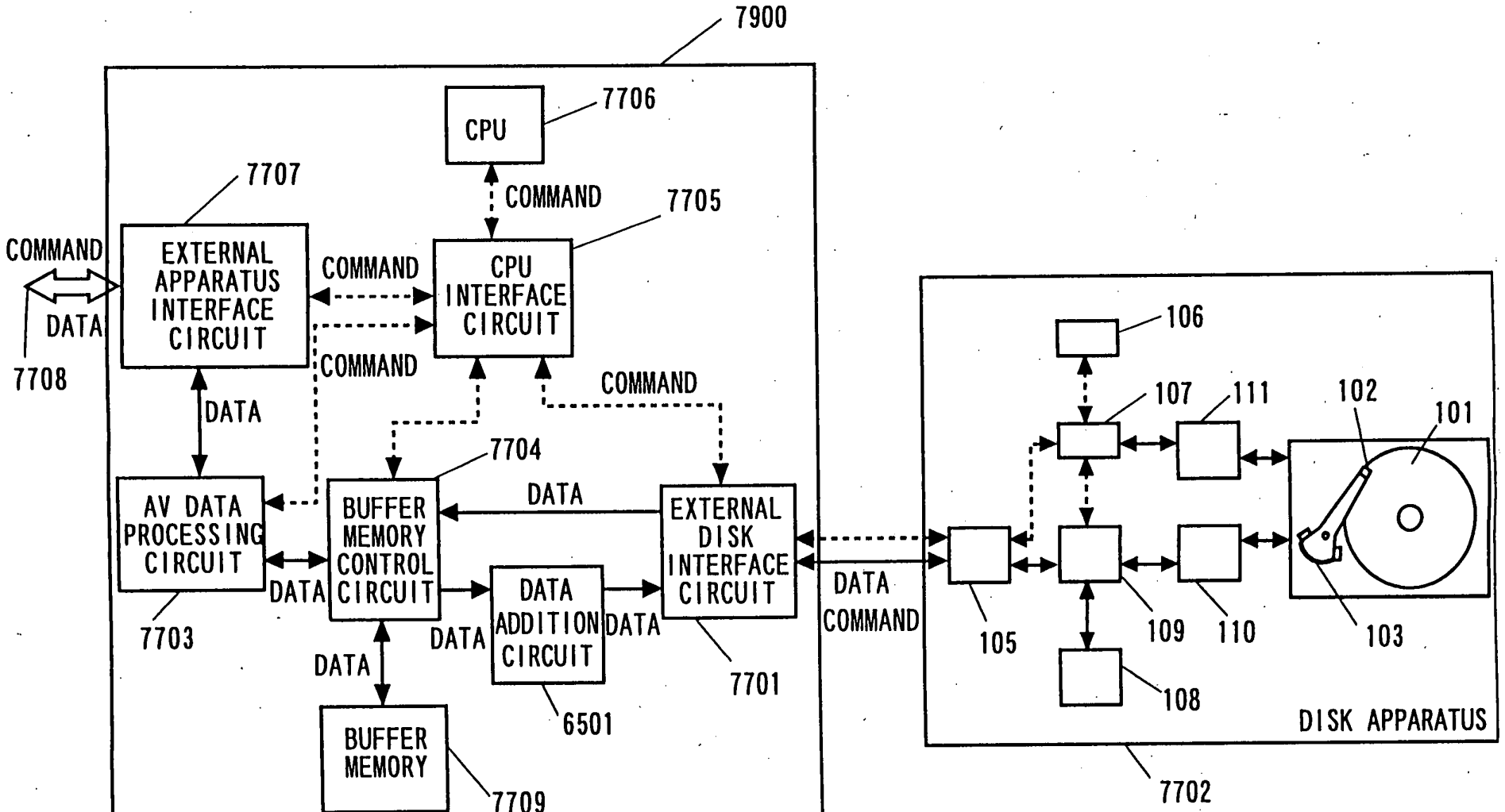


FIG. 80

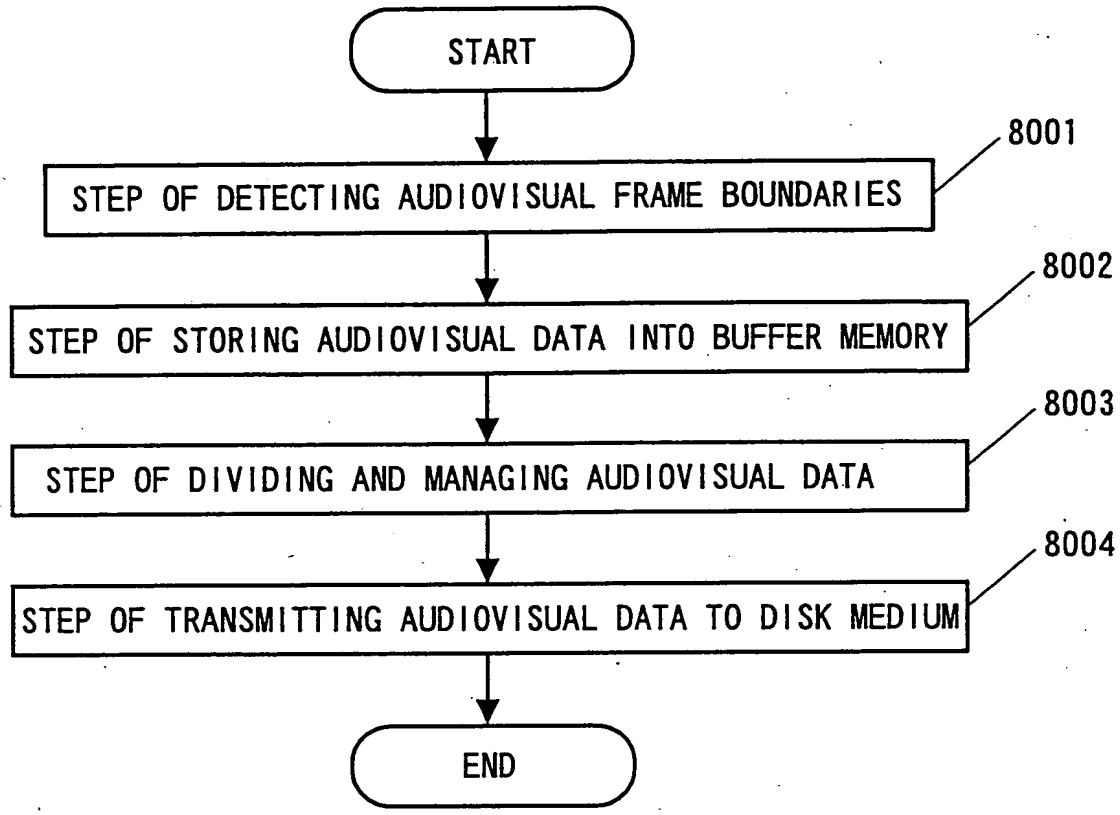

START
STEP OF DETECTING AUDIOVISUAL FRAME BOUNDARIES
8001
STEP OF STORING AUDIOVISUAL DATA INTO BUFFER MEMORY
8002
STEP OF DIVIDING AND MANAGING AUDIOVISUAL DATA
8003
STEP OF TRANSMITTING AUDIOVISUAL DATA TO DISK MEDIUM
8004
END

FIG. 81

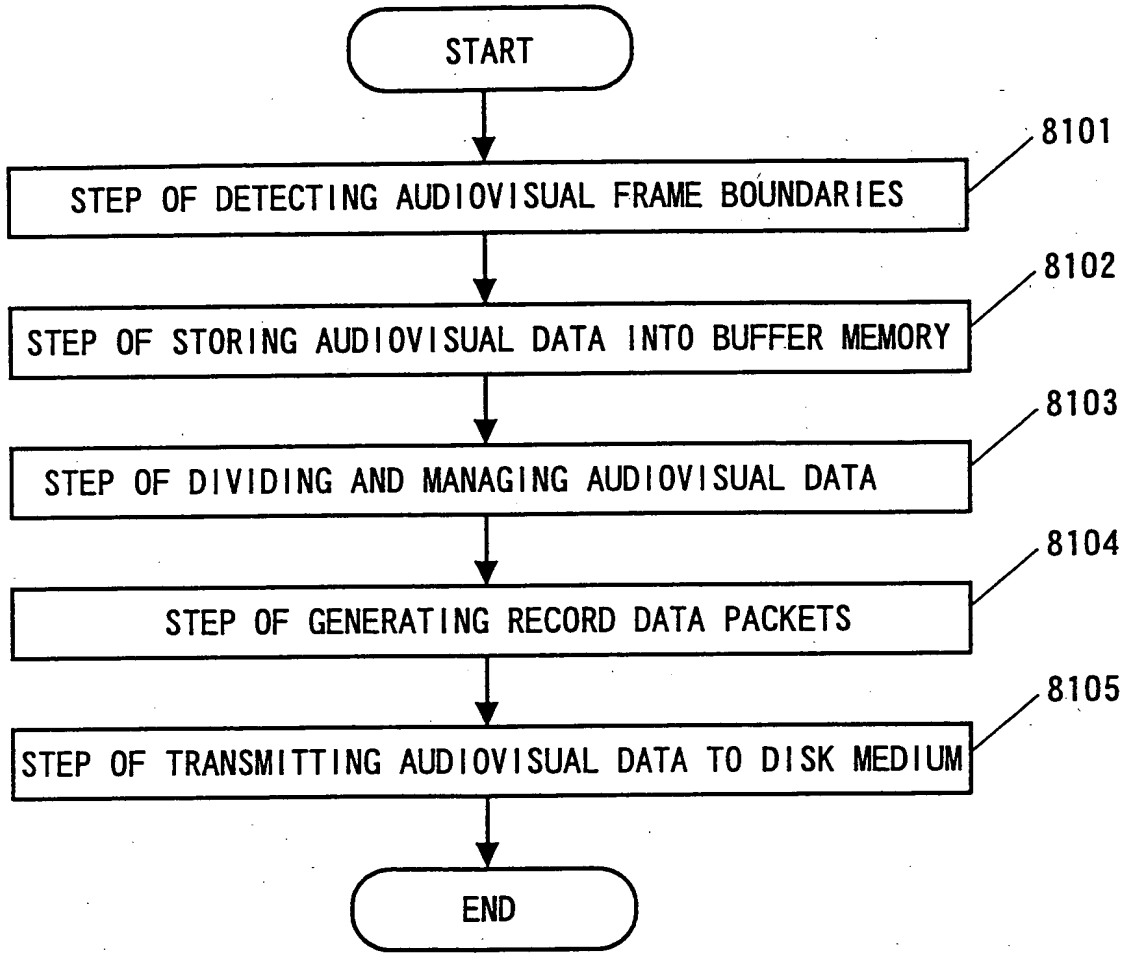

START
STEP OF DETECTING AUDIOVISUAL FRAME BOUNDARIES
8101
STEP OF STORING AUDIOVISUAL DATA INTO BUFFER MEMORY
8102
STEP OF DIVIDING AND MANAGING AUDIOVISUAL DATA
8103
STEP OF GENERATING RECORD DATA PACKETS
8104
STEP OF TRANSMITTING AUDIOVISUAL DATA TO DISK MEDIUM
8105
END

FIG. 82

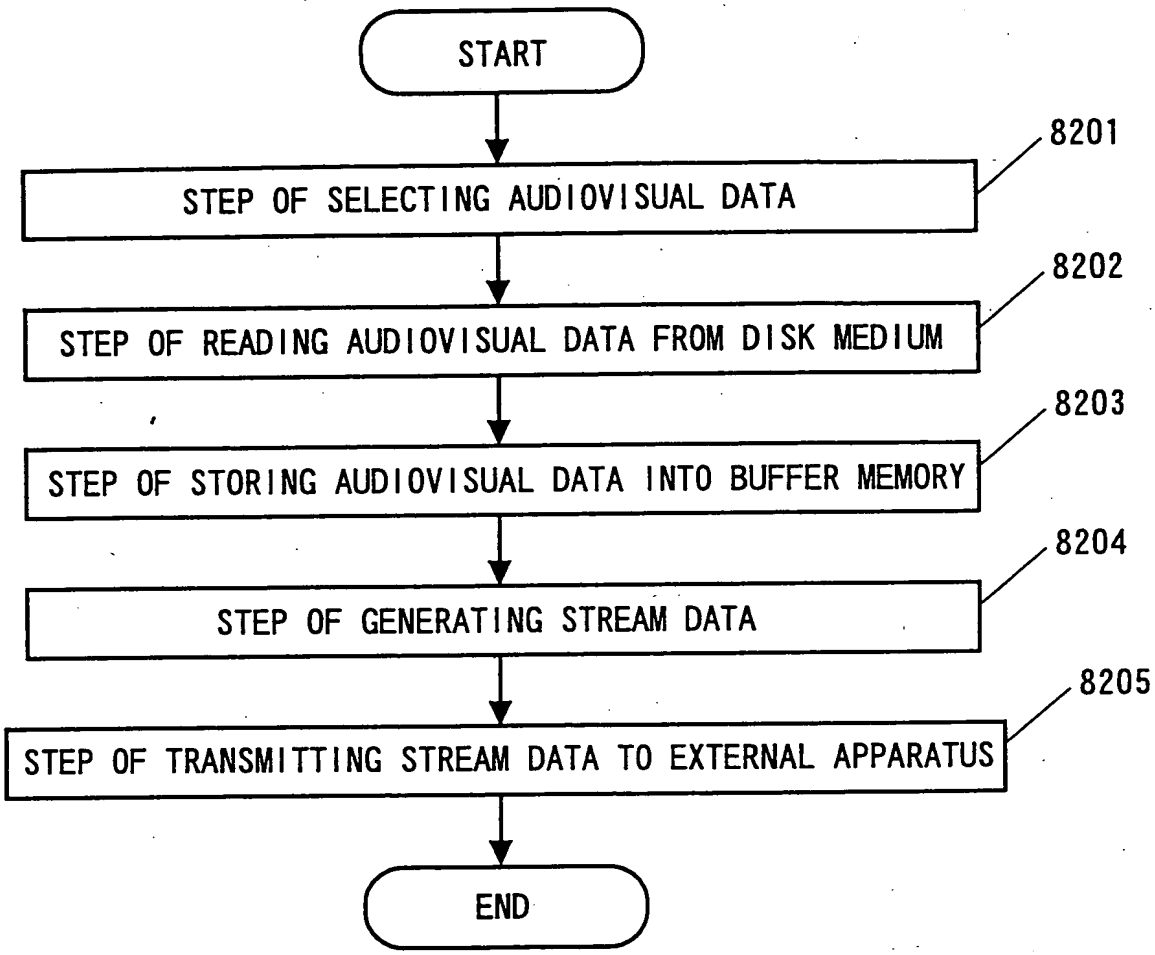

START
8201
STEP OF SELECTING AUDIOVISUAL DATA
8202
STEP OF READING AUDIOVISUAL DATA FROM DISK MEDIUM
8203
STEP OF STORING AUDIOVISUAL DATA INTO BUFFER MEMORY
8204
STEP OF GENERATING STREAM DATA
8205
STEP OF TRANSMITTING STREAM DATA TO EXTERNAL APPARATUS
END

FIG. 83

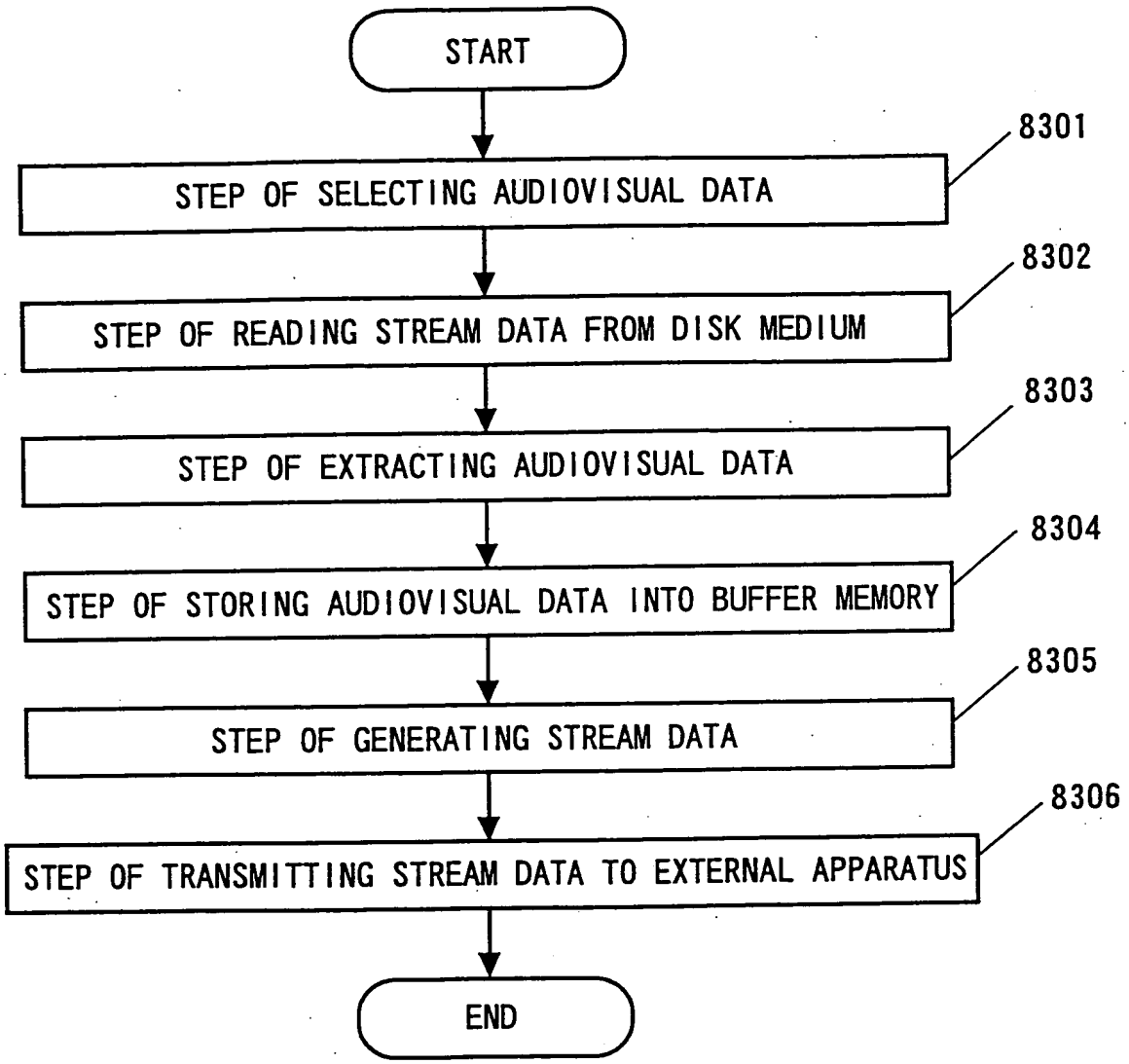
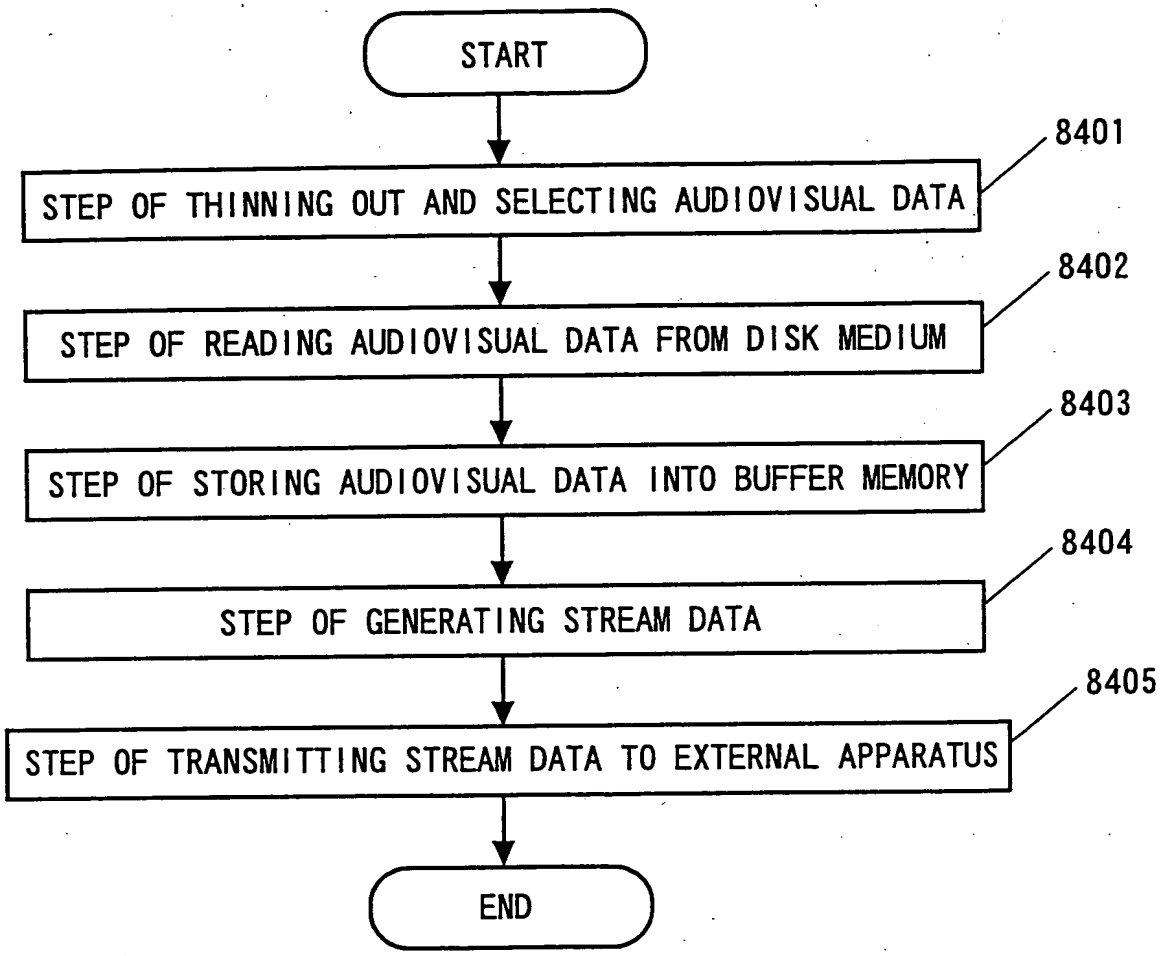

START
8301
STEP OF SELECTING AUDIOVISUAL DATA
8302
STEP OF READING STREAM DATA FROM DISK MEDIUM
8303
STEP OF EXTRACTING AUDIOVISUAL DATA
8304
STEP OF STORING AUDIOVISUAL DATA INTO BUFFER MEMORY
8305
STEP OF GENERATING STREAM DATA
8306
STEP OF TRANSMITTING STREAM DATA TO EXTERNAL APPARATUS
END

FIG. 84


START
8401
STEP OF THINNING OUT AND SELECTING AUDIOVISUAL DATA
8402
STEP OF READING AUDIOVISUAL DATA FROM DISK MEDIUM
8403
STEP OF STORING AUDIOVISUAL DATA INTO BUFFER MEMORY
8404
STEP OF GENERATING STREAM DATA
8405
STEP OF TRANSMITTING STREAM DATA TO EXTERNAL APPARATUS
END